



Landscape Assessment Report on  
Private Sector's Engagement in Disaster Management in  
Vietnam

United Nations Development Program  
Connecting Business Initiative (CBI)



*Empowered lives.  
Resilient nations.*

## Acknowledgements

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## Consultant Team

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## Acronyms

ADB	Asian Development Bank
BCP	Business Continuity Planning
CBi	Connecting Business Initiative
CIEM	Central Institute for Business Management
CSCNDPC	Central Steering Committee for Natural Disaster Prevention and Control
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
MARD	Ministry of Agriculture and Rural Development
MOC	Ministry of Construction
MOF	Ministry of Finance
MOH	Ministry of Health
MOIT	Ministry of Industry and Trade
MONRE	Ministry of Natural Resources and Environment
MOST	Ministry of Science and Technology
MOT	Ministry of Transportation
MPI	Ministry of Planning and Investment
NDPC	Natural Disaster Prevention and Control
NSCCC	National Steering Committee on Climate Change
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
OFDA	US Office of Foreign Disaster Assistance
SDGs	Sustainable Development Goals
SME	Small and Medium-sized Enterprises
TAF	The Asia Foundation
UNDP	United Nations Development Program
USAID	US Agency for International Development
VBF	Vietnam Business Forum
VCCI	Vietnam Chamber of Commerce and Industry
VDMA	Vietnam Disaster Management Authority
VNCRI	Vietnam Cities Resiliency Index

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## Executive Summary

From May to August 2019, the United Nations Development Programme (UNDP), with support from the OCHA-UNDP Connecting Business Initiative (CBI), contracted with a team of one international and one local expert to conduct a rapid assessment of Vietnam's readiness to prepare, respond and recover from disasters. Specifically, the team was tasked with looking for opportunities to improve coordination between the public and private sectors in Vietnam.

Because Vietnam is impacted by a variety of disasters, the landscape assessment team focused on storms and floods and specifically their impact on the local tourism and agriculture sectors. The landscape assessment examined the impact of floods and storms on local communities in two provinces, Quang Nam and Khanh Hoa, because of their recent experiences with extreme weather events, with a specific concern for the impact of such weather events on small and medium enterprises (SMEs), which tend to be unregistered and embedded in the local communities.

The assessment was designed to utilize existing data from a desk review of available research, field visits to meet with representatives from the public and private sectors, and a consultative workshop in Hanoi to review findings and conclusions.

The field visits were conducted in Da Nang and the provinces of Quang Nam and Khanh Hoa over a period of one week. The two provinces selected offered a unique context for examining the varying impacts of disasters on different communities. In fact, some communities were found to be quite resilient while others are not. The difference, as the assessment team observed, is that some communities, like Hoi An City in Quang Nam Province, historically have learned to adapt to regular flooding, and to respond and recover quickly. On the other hand, provinces like Khanh Hoa were not accustomed to serious storms, and therefore less prepared.

However, urban and rural areas were affected differently. Even though Nha Trang, a rapidly growing modern city on the coast of Khanh Hoa, was not accustomed to serious storms, its larger and more prosperous businesses recovered quite easily compared to the smaller SMEs, which suffered serious, disproportionate damage to the degree that an estimated 10-20 percent of SMEs were driven out of business. Geography and urban planning proved to be a factor. For example, as stated by local representatives during field visits to Khanh Hoa, Nha Trang's flooding was impacted by new developments and its geographic disadvantage, as it is built on a sandbar backed by former marshland converted to rice agriculture, thus reducing space for flood waters and hence increasing flood levels. This geography particularly affected smaller businesses within the former marshland area where water was impeded.

The landscape assessment team learned, however, that floods are not just a result of localized storms; floods also originate in the highlands, far from where the impact of the floods are felt. Secondly, some of the greatest impacts of storms are not just from flooding but also from wind,

which can disrupt offshore activities even if not felt on the coast, and which had a more destructive impact on weaker structures and public infrastructure inland.

The impacts on extreme weather events are not localized. The downstream economic impacts of local disasters are a significant threat and drain on national GDP. Thus, local resiliency must be addressed as an economic imperative to ensure a stable business environment and Vietnam's long-term sustainable economic growth.

Currently in Vietnam, the businesses that are more resilient tend to be those that are more urban, more prosperous (i.e., more savings or larger support network), or more experienced coping with disasters. For those businesses that are smaller, more rural (i.e., separated from urban networks), and less experienced, the impacts of disasters are catastrophic. This cannot be remedied merely through improved warning systems, education, or business continuity planning. While these are part of the solution, Vietnam is in need of significant policy, legal and regulatory reforms that require more effective coordination among the central and provincial levels of government, as well as with the private sector, in multiple areas including: upstream and offshore early warning systems; weather monitoring for offshore and in mountainous areas; quality of construction of homes, businesses and public infrastructure; insurance, which currently is not required for any form of disasters except as a condition for some loans; payments into, and management of, disaster recovery funds; and regulations on urban planning.<sup>1</sup>

Larger, more prosperous domestic companies and global corporations are more resilient than smaller local firms. However, to the extent that they rely on local SMEs in their supply chains, they also face substantial risks if their supply chains are not diversified. The Vietnam City Resiliency Index<sup>2</sup> found that the two key drivers for risk management for larger firms are: 1) experience of disruption to the supply chain; and 2) the recognition that SMEs in Vietnam have poor risk management strategies. The firms managed their risks through direct collaboration with SMEs in their supply chain, scheduled workshops on disaster risk management, contractual obligations, technical design, insurance, and use of a diversified portfolio of local and regional suppliers that can offset supply from SMEs affected by disasters.

This report recommends further exploration of a private sector network on disaster management that is funded and tasked with advocating for policy, legal and regulatory reforms encompassing all of the above issues. Such an approach will ensure simultaneously both resiliency against disasters and threats to sustained economic growth.

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<sup>1</sup> Vietnam City Resilience Index. See [https://asiafoundation.org/wp-content/uploads/2018/08/The-Vietnam-City-Resilience-Index\\_update12.11.18.pdf](https://asiafoundation.org/wp-content/uploads/2018/08/The-Vietnam-City-Resilience-Index_update12.11.18.pdf), The insights of the study help to understand the contexts of resilience capacity at the city level.

<sup>2</sup> Burton, D. et. al (2015). Business disaster risk management in Vietnam: Interaction within supply chains. Hanoi: The Asia Foundation.

## I. INTRODUCTION

This landscape assessment was implemented through cooperation between the Vietnam Disaster Management Authority, Vietnam Chamber of Commerce and Industries and the United Nations Development Program (UNDP) in Vietnam, with support from the Connecting Business Initiative (CBI).<sup>3</sup> With operational and technical support by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) and UNDP, CBI is a multi-stakeholder initiative that provides a mechanism for the private sector to engage with governments in a coordinated manner to provide technical advice on the different stages of disaster risk reduction, emergency preparedness, response and recovery management.

The purpose of the landscape assessment in Vietnam was to rapidly assess a variety of data to make realistic recommendations on improving public-private sector coordination in Vietnam to plan for, respond more rapidly and recover from disasters, particularly typhoons and floods, with the objective of also facilitating Vietnam's economic growth, particularly from the perspective of strengthening SMEs and domestic supply chains. Specific data on Vietnam has included past and future disaster trends, research and recommendations from studies on threats and responses, local citizens' experiences, and perspectives from all levels of the government and the private sector, and specific examples of lessons learned from those experiences.

As one of the world's fastest growing middle-income economies in the world, public-private sector coordination is highly important to Vietnam. According to a forecast by PricewaterhouseCoopers in 2017, Vietnam could be one of the fastest-growing economies in the world and, if it could sustain its economic growth, and could become the 20<sup>th</sup> largest economy in the world by 2050. However, Vietnam's economic growth is challenged by the frequency and severity of disasters, and by limitations of local government systems, preparedness and coordination.

According to the World Bank's program on Supporting Integrated Disaster Risk Management in Vietnam: "Over the past two decades, disaster events in Vietnam have caused more than 13,000 deaths and property damage exceeding US \$6.4 billion". Communities around the country are likely to experience increased vulnerability to a variety of adverse disaster impacts. These will have impacts on Vietnam's food security, health, education, and local businesses and supply chains, particularly for SMEs upon which Vietnam's future economic growth will increasingly depend. If not planned for and addressed effectively, extreme weather events, compounded by weaknesses in the private sector and inefficiencies within the local government, will undermine Vietnam's economic growth potential.

The landscape assessment found that extreme weather events are having a disproportionately detrimental impact on Vietnam's SMEs which, though small, have a significant downstream impact on Vietnam's economy. To sustain its economic growth, strengthening the role of SMEs,

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<sup>3</sup> <https://www.connectingbusiness.org/home>

which comprise 95 percent of all Vietnamese businesses, must be prioritized within Vietnam’s policy, legal and regulatory framework for disaster risk management (DRM).

Because the types of business sectors in which SMEs engage are broad, this landscape assessment narrowed its focus to examining impacts and opportunities in two sectors specifically: tourism and agriculture. Past challenges to tourism have included the need for improved infrastructure, facilities and services. Challenges to agriculture have included increased competition, challenges exporting to developed markets with higher standards, and the need to produce higher value products. Some SMEs are learning from experience to overcome such challenges, but their adaptation requires foresight and the ability to learn and respond quickly. Unfortunately, climate change impacts are much harder to prepare for and overcome due to: the lack of experience in some locations; the increased severity and unpredictable paths of storms, including strong winds; flooding stemming from both disasters and environmental changes such as deforestation, development of upriver dams, and rapid urbanization in coastal areas; and other environmental changes.

Recent experiences in Central Vietnam offer useful lessons for the government and private sector on how to respond effectively to threats to businesses from extreme weather events. For example, interviews in Central Vietnam revealed that storm winds have had as great an impact on businesses as water related disasters or floods. The effects of strong winds could be mitigated by stronger structures for both homes/businesses<sup>4</sup> and utilities. A combination of better preparation and rapid responses would help mitigate impacts, particularly in urban areas. More timely warnings – of storms, offshore winds, and upstream floods – would help communities and local companies respond more quickly in advance. And better education and planning through insurance, tax policies and improved emergency funds would help local businesses overcome the worst scenarios.

CBI networks have demonstrated that the private sector can play a key role assisting the government during both disaster response and recovery, and to forge a development framework, policies, legislation, regulations and practices that strengthen safety and economic growth. Therefore, the landscape assessment explored opportunities for the private sector to participate in improvements in laws or regulations, better systems of transparency and accountability, public consultations and/or increased public-private sector coordination.

To understand risks and improve planning, this landscape assessment took advantage of recent studies on environmental issues and recommendations in Vietnam, including from the Government of Vietnam, donors like the World Bank and Asia Development Bank, development organizations like The Asia Foundation (TAF), and private sector companies and advocacy organizations like the Vietnam Chamber of Commerce and Industry (VCCI). Information collected was further supported by discussions during field visits to urban and rural areas in Central Vietnam to better appreciate the problems and the appropriate responses.

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<sup>4</sup> Among SMEs visited, home and businesses tend to be the same location.

The landscape assessment team met with representatives from the public and private sectors in Hanoi and at the provincial and local levels. The team sometimes met with business and government representatives separately. At other times, representatives from the government accompanied the assessment team. This enabled the team to collect information from multiple experiences and perspectives. The discussions from those meetings have yielded insights on the impact of extreme weather events on businesses, gaps in the current legal and regulatory framework, and lessons on how coordination and learning across the public and private sectors could guide future policy- and decision-making.

## II. METHODOLOGY

The assessment took advantage of the latest data on environmental patterns and risks from a desk review of documents on disaster risk, policies, laws and regulations, and other research from a variety of sources, including: VCCI; Vietnam Disaster Management Authority (VDMA); donors like the World Bank (WB) and Asian Development Bank (ADB); selected local governments, local social organizations; development organizations like TAF; and the private sector.

The desk review was followed by preparation of a standard set of questions aimed at extracting specific information from respondents on their experiences of disaster risk management. Interviews and focus group discussions targeted representatives from the government and private sector to better understand the perspectives of each. The data collection tool included a core set of consistent questions, such as on the legal and regulatory framework, coordination between the central and local level, coordination between the government and the private sector, impact on SMEs, and specific questions designed to understand those issues that are unique to the tourism and agriculture sectors.

In addition to meetings in Hanoi, field visits were conducted to two locations: Quang Nam, a poor agricultural province along a large river prone to flooding, and home to the ancient city of Hoi An City, one of the most resilient and tourist-friendly cities in Vietnam; and Khanh Hoa, also a poor agricultural province but with booming tourist and residential developments on the coast, namely at Nha Trang City. These two provinces were selected because of recent typhoons and the impacts experienced from strong winds and floods. The two provinces offer unique contrasts. Hoi An is a case study on resiliency and effective city planning based on tradition and local knowledge instead of relying on government regulation. In comparison, the province of Khanh Hoa has had very little experience with extreme weather events until Typhoon Damrey arrived in 2017. These experiences offer alternative case studies on: 1) the positive impacts when communities are aware, well-prepared, and well-coordinated; and 2) the sizeable negative impacts of poor awareness and planning.

Following the field visits, a consultative workshop was held with a variety of public and private sector representatives to review the findings and recommendations together on 3 July 2019.

Findings from the above efforts are captured throughout this report.

### III. ASSESSMENT FINDINGS AND RECOMMENDATIONS

#### 1. Disaster Risk Assessment

**Vietnam is one of the most at-risk countries in the world from changes in weather.** Vietnam ranks fifth in the world for countries most affected by extreme weather events,<sup>5</sup> and it is among the countries most at risk from climate shocks in the Asia-Pacific region.<sup>6</sup> The 2014 Climate Risk Report for Vietnam projects that temperatures will increase across all seven of its sub-regions<sup>7</sup> and that, by 2100, the average annual temperatures will rise by an average of 2.3 degrees Celsius. Rainfall will decrease in summers/dry seasons throughout Vietnam but will increase in Central Vietnam in all other seasons. In total, annual rainfall will increase, meaning that, while summers will be drier – a threat to agriculture on one extreme – rainy periods will be wetter – another threat to both agriculture and tourism at the other extreme.

**Coastal areas in Central Vietnam are being particularly strongly affected by changes in weather.** With a coastline of 3,400 kilometers, approximately 59 percent of Vietnam’s land area and 71 percent of its population are vulnerable to disasters.<sup>8</sup> About 70 percent of Vietnams’ population live in low-lying areas close to the coastline. On average, Vietnam experiences four to six typhoons per year. This landscape assessment focused on cities in Quang Nam and Khanh Hoa, but neighboring provinces along the central coast, such as Thua Thien Hue, Quang Ngai and Binh Dinh, are historically the most vulnerable to flooding. During the last three months of 2016, heavy rain caused five flooding events, affecting 18 central region provinces causing landslides, damaging infrastructure, and filling irrigation and hydropower dams to capacity, which resulted in water discharges that further intensified flooding in coastal areas.

**Weather patterns have become less predictable.** The risk of storms and floods no longer follow historic patterns. As witnessed in 2017, Typhoon Damrey hit Khanh Hoa directly for the first time in residents’ memory. In comparison, in Hoi An City, Quang Nam Province, the assessment team found from interviews with local people that typhoons are less frequent and do not hit Hoi An as regularly; over the last 10 years, Hoi An was hit directly by three typhoons. However, over the same time period, Hoi An has experienced 15 floods, seven of which (or about half) were above warning Level 3, i.e., a water depth of two meters above normal level, thus indicating the impact of storms in the highlands. Even storms that do not make landfall can be devastating. For example, in 2009, Tropical Cyclone Ketsana brought heavy rains to the central region of Vietnam which caused an estimated US\$800 million in damage and had an estimated impact of 2.9 percent on GDP.

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<sup>5</sup>A comprehensive synopsis of climate change projections can be found in the technical report, “High Resolution Climate Projections for Vietnam,” Katzfey et al. (2014)

<sup>6</sup> UN-OCHA 2016.

<sup>7</sup>See Footnote 1.

<sup>8</sup>World Bank 2010.

**Other environmental events, including droughts, salt water intrusion, and rising sea levels, are aggravating the severity of extreme weather events.** While the focus of this landscape assessment was on the impact of typhoons and floods, other extreme weather events are aggravating their impact. Dry seasons are getting drier and severe droughts risk affecting most of the country, such as recently experienced in the Mekong Delta and Central Vietnam in 2014-2016, and again in 2019. Compacted soil following dry periods will result in rainfall not being as easily absorbed into the ground. Secondly, deep wells in urban areas and industrial zones to collect water, such as in the Mekong Delta, are causing land to sink. These factors are increasing the likelihood of more flooding. In 2016, Khanh Hoa experienced both a serious drought, which necessitated government action to limit water use and cut off irrigation in some areas, and heavy rains that led to flash floods and landslides killing four persons and injuring six others.

According to data reported by MARD, the 2015-2016 drought plus salt water intrusion had severe impacts on 18 provinces in the country, resulting in a direct economic loss of over VND 15,000 billion, or approximately 0.35% of national GDP, thus leading to negative agriculture sector growth.<sup>9</sup> While this landscape assessment did not focus on saltwater intrusion, current agriculture is threatened in areas prone to a combination of even short-term flooding combined with increased salinity conditions. Saltwater intrusion will worsen as sea levels rise and more ground water is affected.

Based on the 2016 Climate Change and Sea Level Rise Scenario by MONRE, sea level rise in the coastal areas of Viet Nam will be higher than the average global sea level. If the sea level rises 100 cm without any adaptation measures, an area of about 16.8% of the Red River Delta, 17.8% of Ho Chi Minh City and 38.9% of the Mekong Delta will be at high risk of inundation. A World Bank study has projected that such an increase in sea level would partially inundate 11% of the population and 7% of agricultural land.<sup>10</sup> Rises in sea level will also aggravate the impact of flooding in coastal areas depending on the tides.<sup>11</sup> As noted by a hotel manager near the mouth of the Thu Bon River in Hoi An, the level of flooding is greater when there is a high tide.

**The impact of extreme weather events has been much more severe on rural communities.** As noted above, the impact of extreme weather events was much less in Hoi An City because of its preparedness, but Hoi An is an urban community. The impact of Typhoon Damrey in Khanh Hoa was disproportionately impactful on rural areas. In comparison, the impacts of Typhoon Damrey on Nha Trang City, on the coast of Khanh Hoa, was more limited except for those areas behind

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<sup>9</sup>World Bank 2016, Toward Integrated Disaster Risk Management in Vietnam – Recommendations Based on the Drought and SWI Crisis and the Case for Investing in Long-Term Resilience.

<sup>10</sup>World Bank and Global Facility for Disaster Reduction and Recovery (GFDRR) 2011; GFDRR 2015.

<sup>11</sup> “Exposure to Floods, Climate Change, and Poverty in Vietnam,” Bangalore, Smith, Veldkamp, Economics of Disasters and Climate Change (2019), <https://doi.org/10.1007/s41885-018-0035-4>. The research combines new high-resolution flood hazard datasets; both riverine and coastal flooding and climate change down to a very localized spatial level; and socioeconomic dimension of poverty.

the urban development. The larger and more prosperous businesses, with stronger buildings and more resilient infrastructure, were able to cope much more effectively.

**Urbanization has been contributing to the impact of extreme weather events.** Urbanization will reach 56 percent in Vietnam by 2050. Its urban economic growth rate has been 12-15%, or 1.5 to 2 times higher than the national average economic growth rate.<sup>12</sup> The Ministry of Construction has identified the following impacts of urbanization that should be remedied in development plans: area of lakes and rivers reduced; increase in impervious surfaces (i.e., concrete); drainage systems degraded; climate change contributing to increased storms, hurricanes, and rise in sea level; poor quality of planning and management; forecasting, which is still limited; lack of investment capital; and poor community awareness.<sup>13</sup> Many small and mid-sized cities lack comprehensive development plans, and even larger cities are allowing development without thorough disaster risk assessments.<sup>14</sup> In Khanh Hoa, for example, citizens reported that recent roadways had aggravated flooding, and areas behind recent developments, such as in Nha Trang City, suffered a disproportionate share of damage.

**Communities have demonstrated that preparedness reduces the impact of extreme weather events.** The government and private sector in Hoi An are familiar with floods and typhoons. No one has been killed as a result of floods in Hoi An in the last 100 years. Because of their experience, they respond quite well; the government has done an effective job coordinating with related stakeholders and information sharing on flood response through various channels, including with households, local businesses and ward, commune and village leaders. In comparison, due to lack of experience and preparation in Khanh Hoa, Typhoon Damrey severely impacted human life and the economy: 45 people were killed; 100,000 (or approximately 90%) of houses were damaged; and there was approximately VND 15.5 trillion in economic loss, including around VND 10 trillion to the agricultural sector alone. By local accounts, the damage from Typhoon Damrey was more severe in the rural areas because: the population and businesses were not prepared for severe weather; they were too passive responding; and they were too slow to recover afterward.

**Poor infrastructure is aggravating the impacts of severe weather events.** Infrastructure (e.g., construction and upkeep of dikes, embankments, riverbanks, irrigation canals, diversion dams, roads, bridges, culverts, etc.), in addition to not being planned effectively enough, has been

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<sup>12</sup> "Urban Green Growth: Practical Implementation in Vietnam," presentation by Dr. Nguyen Tuong Van, Director General, Urban Development Agency, Ministry of Construction, 2017.

<sup>13</sup> "Drainage and Wastewater Treatment Planning in Vietnam", presentation by Assoc. Prof. Dr. Nguyen Hong Tien, Director General, Administration of Technical Infrastructure, Ministry of Construction.

<sup>14</sup> While Vietnam has recently implemented policy impact assessment processes for the review of new laws per the 2015 Law on Legal Normative Documents, and guidance has been provided in a Handbook by the MOJ on how to conduct legal, procedural, economic, social and gender impact assessments, there is not yet any national guidance on how to conduct environment impact assessments (EIAs). There is no requirement that EIAs be conducted for new buildings and infrastructure, and awareness of such preparations is low among persons engaged in planning and construction.

showing signs of not being resilient enough. According to interviews in rural areas of Khanh Hoa, it took one month to restore power from fallen lines and to remove obstructions from roadways. According to the desk review, in four provinces in Central Vietnam alone over the last ten years, 54 percent of the damage was to the transportation infrastructure, or approximately US\$70 million; recovery and reconstruction cost approximately US\$143 million to replace what was lost with more resilient structures.<sup>15</sup>

**Many small and medium-sized cities lack comprehensive development plans, and even larger cities are allowing development without thorough disaster risk assessments.**<sup>16</sup> Businesses in both Quang Nam and Khanh Hoa provinces gave specific examples of how urbanization has contributed to flooding and damage,<sup>17</sup> including from new roads that are being constructed without the necessary disaster risk assessments and construction along the coast that is impeding the natural flow of water during heavy rains. Sand excavation in high-risk coastal areas is increasing the severity of floods in coastal areas.<sup>18</sup> The proportion of households connected to the urban drainage network in many places is still very low, which is also contributing to flooding in both urban areas and outlying areas where drainage of water is impeded.

**The economic impacts of extreme weather events are increasingly severe.** According to a rapid assessment report by the Government of Vietnam, in cooperation with the World Bank, Vietnam is likely to incur, on average, US\$1.4 billion per year in direct damage due to floods, typhoons, and earthquakes. In the next 50 years, if unprepared, Vietnam has a 40 percent chance of experiencing a disaster with an economic loss exceeding US\$6.7 billion, and a 20 percent chance of experiencing a loss exceeding US\$8.1 billion.<sup>19</sup> The assessment team carried out an analysis of data on losses at the national level and in the areas assessed over the last 10 years; the results show a clear trend of increased losses, as illustrated in Figures 1 and 2 below:

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<sup>15</sup> Rapid Flood Damage and Needs Assessment (RFDNA), prepared by the Government of Vietnam with technical contributions from the World Bank task team and support from the Global Facility for Disaster Reduction and Recovery (GFDRR), page 9.

<sup>16</sup> While Vietnam has recently implemented policy impact assessment processes for the review of new laws per the 2015 Law on Legal Normative Documents, and guidance has been provided in a Handbook by the MOJ on how to conduct legal, procedural, economic, social and gender impact assessments, there is not yet any national guidance on how to conduct environment impact assessments (EIAs). There is no requirement that EIAs be conducted for new buildings and infrastructure, and awareness of such preparations is low among persons engaged in planning and construction.

<sup>17</sup> Deputy Minister of Agriculture and Rural Development Hoang Van Thang cited many examples of infrastructure projects that increase disaster risks and unsustainable development.

<sup>18</sup> Asian Development Bank Report, 2013, quoting McNally, 2011.

<sup>19</sup> Rapid Flood Damage and Needs Assessment (RFDNA), prepared by the Government of Vietnam with technical contributions from the World Bank task team and support from the Global Facility for Disaster Reduction and Recovery (GFDRR), page 11, citing the World Bank Disaster Risk Financing and Insurance Program, Vietnam Sovereign Disaster Risk Finance Study, with support from the Swiss State, Secretariat of Economic Affairs (SECO), 2016. Earthquakes are much less frequent in Vietnam and are not a focus of this report.

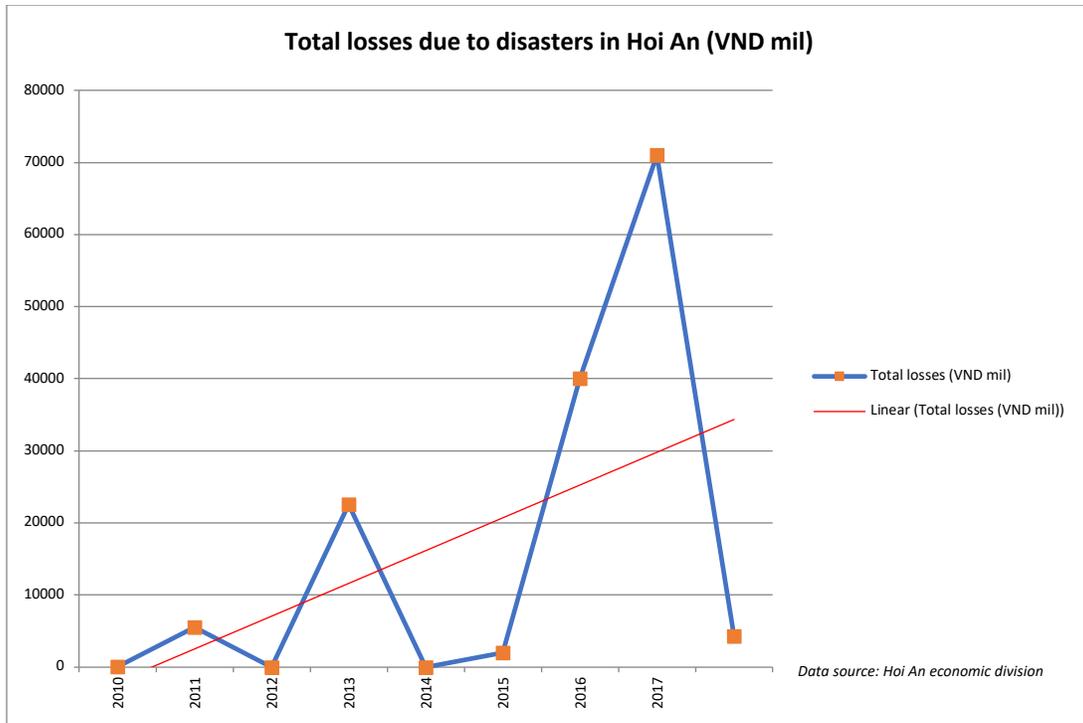


Figure 1: Losses due to disasters in Hoi An from 2010 to 2018

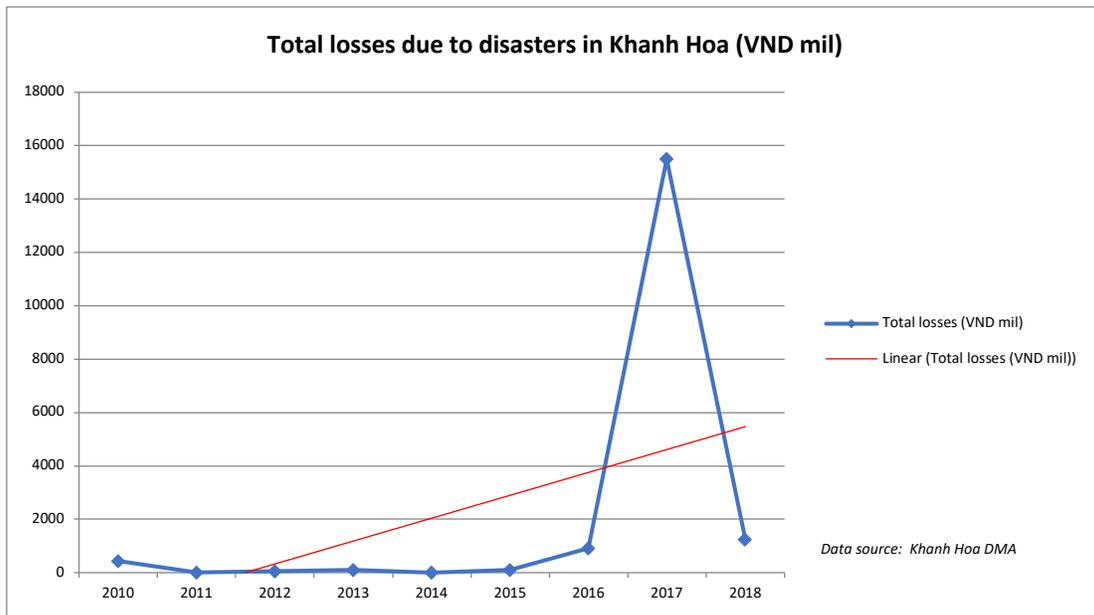


Figure 2: Losses due to disasters in Khanh Hoa province from 2010 to 2018

**Localized impacts of extreme weather events affect the economy nationally.** Some provinces will be impacted by individual extreme weather events more severely than others.<sup>20</sup> However, regardless of where extreme weather events strike in the future, the devastating economic effects will be felt nationally, as demonstrated in Figure 3 below. As demonstrated in a model by the International Food Policy Research Institute (IFPRI), in cooperation with the Ministry of Planning and Investment’s (MPI) Central Institute for Economic Management (CIEM), primary agriculture was only 15.6% of total GDP in 2007 but, when the full agricultural value chain was included, the contribution from agriculture throughout the value chain was almost double, or 27.5% of GDP.

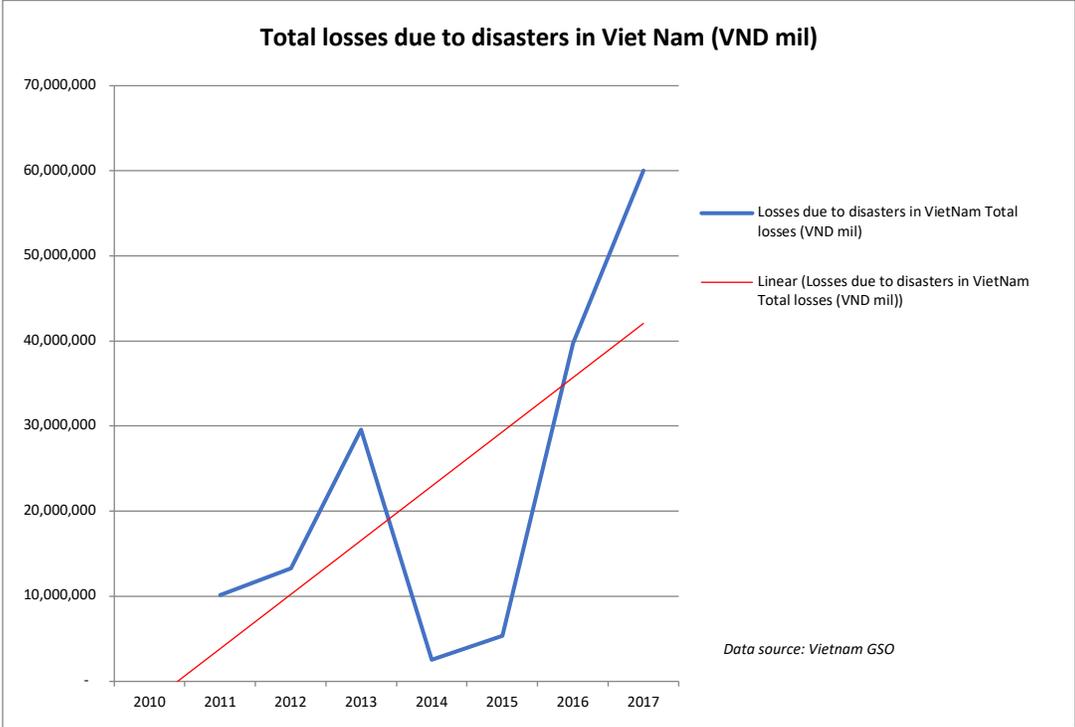


Figure 3: Losses due to disasters in Viet Nam from 2010 to 2017

Impacts in the value chain are felt disproportionately on SMEs. As noted by a VCCI representative at a workshop in July 2017, at the end of the five-year USAID-funded project on “Strengthening Public-Private Partnerships for Disaster Risk Management and Community Resilience in Vietnam,”<sup>21</sup> the impacts of disaster and climate risks on businesses’ production and operations in Vietnam are increasing particularly for SMEs. The workshop also reported that the capacity of businesses to respond to disaster and climate risks is still limited and is mostly self-managed due to a lack of information and technical support. The assessment team observed this while carrying field meetings in Khanh Hoa Province, where local businesses estimated that ten percent of local SMEs went out of business in the area hit by Typhoon Damrey. This information

<sup>20</sup>See High-Resolution Climate Projections for Vietnam: Technical Reports, CSIRO, Katzfey, JJ, McGregor, JL and Suppiah R, 2014,

<sup>21</sup><http://www.vccidanang.com.vn/63-55-3345/Hoi-thao-%E2%80%9CQuan-ly-rui-ro-thien-tai-trong.aspx>

was also supported by a representative at the provincial Department of Tax, although the estimate of SMEs that went out of business was even higher.

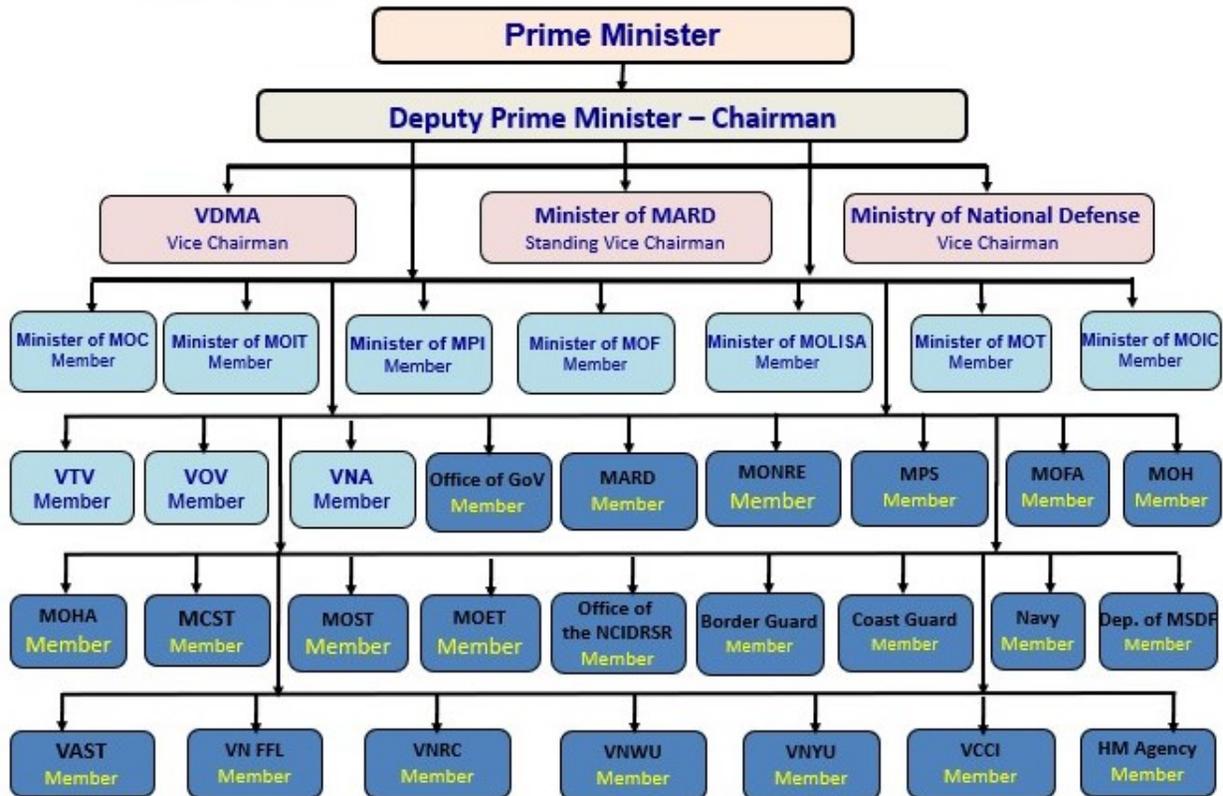
## 2. Policy and Institutional Analyses

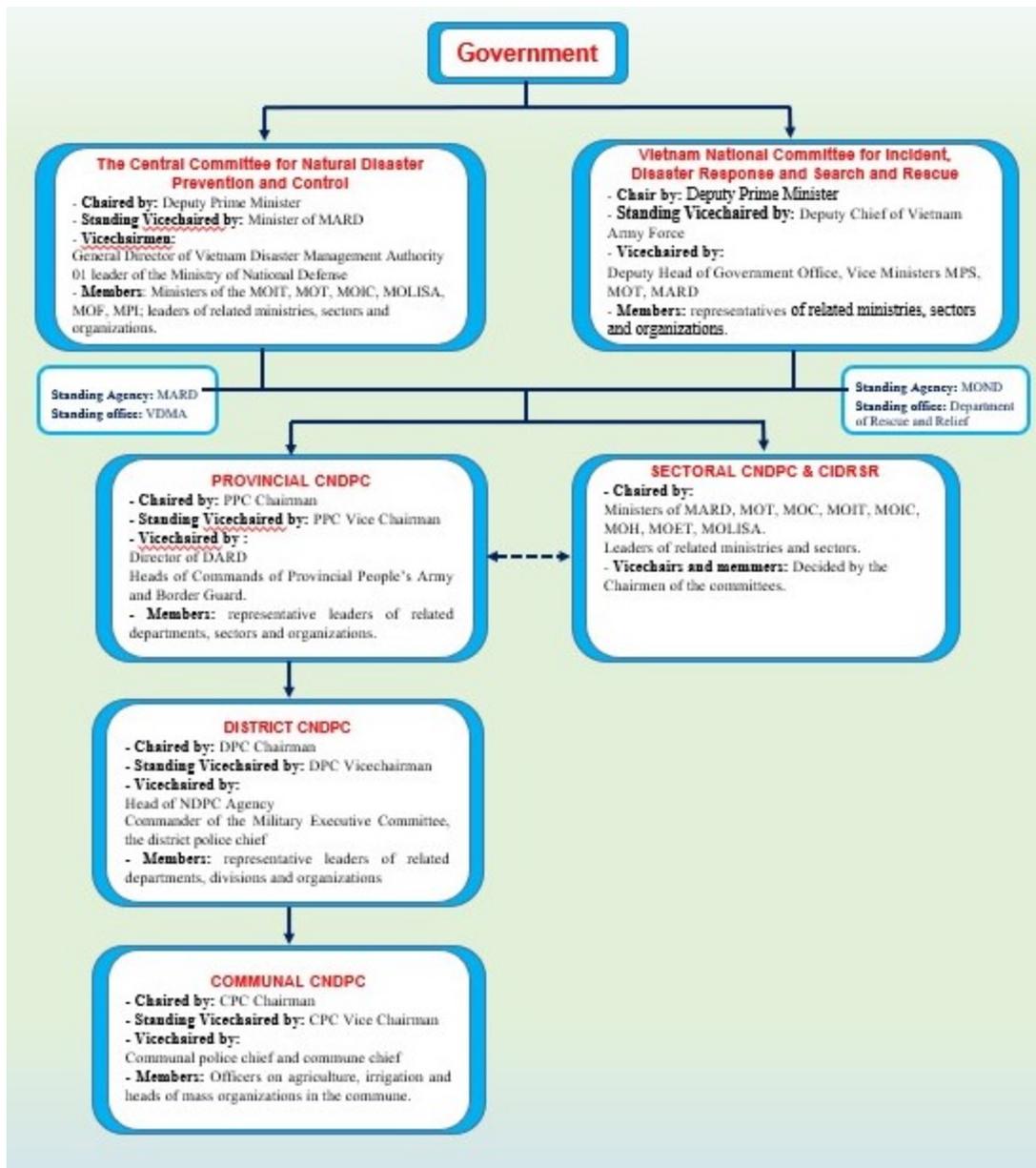
The landscape assessment team collected and analyzed Vietnam’s current legal and regulatory framework relating to disaster management, namely the Law on Disaster Risk Management, and looked for examples of effective private sector engagement within the current framework. Vietnam has a significant legal framework; the long list of international commitments and laws is provided at Annex III.

MARD is Vietnam’s focal point for mitigating and responding to disasters and extreme weather events. Per the Law on Natural Disaster Prevention and Control (NDPC), MARD leads the Vietnam Disaster Management Authority. In 2019, with Decision No.460/QĐ-TTg, dated April 25, 2019, a standing office for the Central Steering Committee for Natural Disaster Prevention and Control (CSCNDPC) was established to facilitate decision-making on national and international investments in disaster prevention and control at the national and provincial levels.



### The Central Committee for Natural Disaster Prevention and Control (37 members)





But despite having a significant legal framework and network of institutions, the economic impacts of extreme weather events indicate that there are limitations in the national NDPC systems.

**Improving public-private sector coordination.** As noted earlier in this report, under Disaster Risk Assessment, improved public-private sector coordination is essential to addressing Vietnam's complex challenges of: urbanization; vulnerable infrastructure and poor preparedness, especially in areas that are rural and inexperienced with extreme weather events; landscape changes upriver (e.g., dams) and in coastal areas (e.g., construction and excavation); and unpredictable impacts of environmental events from increasingly severe and less predictable weather patterns, salt water intrusion, and rising sea levels. The issues are interrelated and complex. Changes in

policy, laws and regulations will be imprecise and poorly implemented without the full participation of the private sector, both at national and local levels.

The Law on NDPC introduced some legal provisions that could be used to strengthen environmental and economic resiliency by engaging with the private sector in disaster planning. Article 35 requires enterprises to become disaster resilient through such specific actions as: to take the initiative to protect their own physical premises and “production and business activities” during disasters; to formulate and implement DRM plans; to apply national safety regulations in construction; to participate in DRM awareness-raising, knowledge and training; to have emergency drills linked to official government response plans; to comply with instructions and commands of competent agencies and obey urgent orders on mobilization of personnel, supplies, and equipment during emergencies; to take the initiative in conducting environmental sanitation, epidemic and disease prevention and control in disaster-hit areas where they operate; and to participate within their capacity in disaster response, emergency assistance and recovery. Enterprises are also required to make contributions to the government natural disaster prevention and control fund’ (Article 35 (2) ((a) – (i)). The law does not refer explicitly to requiring business continuity planning, but Article 35 does require that businesses “formulate and implement disaster risk management plans”. It is unusual to find such specific obligations in a national law on disaster risk management, and although the consequences of non-compliance are not set out, they provide a good basis for education and awareness-raising about DRM with businesses on prevention, mitigation and response to disasters.

However, the private sector is absent as a beneficiary under recent Ordinance No. 02/2017/ND-CP, dated September 1, 2017, on Mechanisms and Policies to Support Agricultural Production Recovery After Disasters and Diseases, and as noted at a meeting with government representatives during the landscape assessment in Quang Nam: “Based on current existing regulations both at national and provincial levels, private sector enterprises are not yet actors to receive support after a disaster.” Arguably, a closer analysis of the impacts of disasters in consultation with the private sector, and at least an effort to identify potential improved areas of support, would yield lessons on improving preparation, readiness and responses in the future.

Decree 160/2018/ND-CP, dated November 29, 2018, replaced Decree 66/2014/ND-CP guiding implementation of the Law on NDPC. Decree 160’s Article 23, on the Steering Committee of the NDPC, allows for the participation of groups, cooperatives and enterprises, but it does not stipulate any specific right or responsibility: “Depending on the specific conditions, the head of the agency or organization shall decide to set up a Steering Committee for natural disaster prevention and control and search and rescue in order to implement tasks on natural disaster prevention and control according to law provisions”. However, this defect was remedied in part with Decision No. 460/QĐ-TTg, dated April 25, 2019. Article 3,1.c) of the Decision requires that the Central Steering Committee for Natural Disaster Prevention and Control (CSCNDPC) include “leaders from the Vietnam Fatherland Front, Vietnam Women’s Union, Youth Union, Vietnam Red Cross, Vietnam Chamber of Commerce and Industry (VCCI)...” among others. The inclusion of VCCI in this recent decision offers opportunities to strengthen government engagement with the private sector, but there are other Vietnamese organizations, such as the Association of

SMEs (VINASME) and multiple industry associations representing specific business interests. A requirement to increase collaboration with the private sector would be preferable to facilitate future planning and decision-making.

**Improving community participation in policy and law making.** There are excellent examples of cities in Vietnam that are resilient and have learned to live with floods,<sup>22</sup> like Hoi An, but their resilience is a product of experience and adaptation over time. Unfortunately for many communities, the effects of climate change are coming quickly, and severe weather events may strike others unprepared, as when Typhoon Damrey struck Khanh Hoa in 2017. Resilient communities could play a valuable role as stakeholders in consultations on improved national policies, laws and regulations that could be applied to communities to help them and the government to be better prepared to cope with the realities of more rain, higher winds, increased flooding and other disruptions brought on by future severe weather events. Through improved collaboration and knowledge-sharing, communities that have not learned to adapt to extreme weather could benefit from the knowledge and participation of those that have.

An obvious opportunity to learn from the private sector comes with the new policy impact assessment (PIA) process, implemented by the Ministry of Justice in 2018, per the mandate of the Law on Legal Normative Documents of 2015, and which presents the opportunity to facilitate a more inclusive approach to the development of policies, laws and regulations, as well to facilitate more consultative public-private sector engagement generally. The new PIA process mandates that the private sector be consulted in the development of new laws and that policy impact assessments be completed in advance to ensure that new laws fully meet their purpose and the public need. This process could be extended to the development of new regulations.

Because the Disaster Risk Assessment has identified a variety of threats and impacts throughout Vietnam, a consultative process that engages local populations from a variety of locations – mountainous, coastal, rural, urban, northern, central and southern – is needed to inform effective planning.

**Improving government coordination locally.** The Institute for Social and Environmental Transition, the Urban Development Agency of the Ministry of Construction, and The Asia Foundation developed the Vietnam City Resilience Index (VNCRI), which was piloted in five cities and implemented in a total of 28 cities nationwide. The VNCRI provides a range of quantitative and qualitative variables for 12 resilience goals, focused on: health and well-being; leadership and strategy; economy and society; and infrastructure and environment. Its goal-level data offers a means of ranking urban areas based on their resilience capacities, while data at the variable-level allows for identification of resilience strengths and weaknesses.<sup>23</sup>

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<sup>22</sup> Speaking on the Mekong Delta, JICA expert Tachi Kenichiro recommended changing the mindset to proactively living with floods, inundation and saltwater intrusion.

<sup>23</sup><https://asiafoundation.org/publication/the-vietnam-city-resilience-index/>

Another necessary level of engagement is improved coordination between urban and rural areas to ensure that improvements in one area – such as diversion of water from embankments, new roadways, dams or construction projects – do not have an unforeseen and potentially damaging impact on others.

**Improving urban planning through improved laws and implementation.** The Law on Urban Planning dates back to 2009, and has been criticized for not effectively facilitating engagement between public and private sectors, nor with communities. Another immediate need where the private sector should play a role is the development of a Law on Drainage, which does not yet exist in Vietnam.<sup>24</sup> The Law on Construction of 2014, could be better implemented to regulate construction activities and such requirements as feasibility studies, elevation, and “[e]nsuring the compliance of work construction investment with master plans and designs, the protection of scenery and environment; the suitability to natural and social conditions and cultural characteristics of each locality; ensuring the stable life of people; combining socio-economic development with national defense and security and response to climate change”.<sup>25</sup> The Law on Environment Protection of 2014, also provides for environmental assessments and environmental planning, which could be better enforced on urban planning projects. Overall, effective broad-based, public-private sector consultations to set stronger national standards for catchment, management, and facilitation of unimpeded flow of large volumes of water, from the mountains to the sea, should be prioritized.

**Improving urban planning through international commitments.** Vietnam has committed itself to adapting to climate change and to developing smart cities, especially in Danang, Hanoi and Ho Chi Minh City as part of the ASEAN Smart Cities Network (ASCN), which was launched in May 2018. The ASCN is a collaborative platform through which 26 pilot cities from ten ASEAN member states work towards the common goal of smart and sustainable urban development. The 26 member states implement smart urban solutions, particularly management of water and wastewater, alternative energy, and flood monitoring systems. The ASCN aims to facilitate ongoing cooperation on smart cities development, catalyze bankable projects with the private sector, and secure funding and support from ASEAN’s external partners.

**Improving disaster risk management planning by enterprises.** Decree 160/2018/ND-CP, dated November 29, 2018, replacing Decree 66/2014/ND-CP, guides implementation of the Law on NDPC, which only stipulates the rights and responsibilities of “economic organizations.” However, the new decree does not touch on the role and responsibility of enterprises to cooperate with the government nor to prepare DRM plans. Improved support to the private sector, in combination with better standards and strict requirements on preparation and

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<sup>24</sup>There are decrees, namely Decree No 80/2014/ND-CP, on Drainage and Wastewater Treatment Orientation, and Decision No. 589/QĐ-TTg, on Approving the Revised Orientations for Water Drainage in Urban Centers and Industrial Parks through 2025, with a Vision Toward 2050. But these are not effective for coping with increased flooding in urban areas, especially for communities not accustomed to flooding.

<sup>25</sup> Article 4.1, Law No. 50/2014/QH13, on Construction.

mitigation of damages, would help motivate enterprises to do more to improve their risk management planning.

**Improving the Fund for Disaster Prevention and Control.** The Law on NDPC requires businesses to make contributions to the government’s Fund for Disaster Prevention and Control. Article 10 of the Disaster Prevention Fund provides that the fund is to be used to support disaster prevention activities, with priority to: emergency relief on food, water, medicine, and other urgent needs; support for the repair of houses, hospitals, and schools; and managing environmental sanitation in affected areas. Article 10 states that the government promulgates specific regulations on the fund, including levels of contribution, exemptions, reduction or postponement of contributions, and management. But the fund is to be established at the provincial level and managed by the Provincial People’s Committee. The fund is not sourced from the national budget. Rather, contributions from domestic and expatriate economic organizations operating in the area are supposed to be compulsory, and other contributions from organizations and individuals are supposed to be voluntary.

If effectively implemented and managed, along with improved preparation and mitigation against loss, the fund has the potential to be a source of support to the private sector to support the continuity of Vietnam’s economy following a disaster. But unfortunately, according to a study by VCCI and The Asia Foundation in 2016, the fund “has no clear purpose and does not support businesses at all.” This sentiment was echoed by businesses interviewed in Quang Nam and Khanh Hoa during the landscape assessment. Businesses expressed their concerns about how the fund was being used and for what purposes and, without information, they wondered how their contributions were utilized. Some businesses claimed that they contributed to the fund based on the government regulations, but they have not received any support nor even a communication from the government when they suffered even a serious loss from a disaster. Others reported that some businesses do not contribute to the fund at all. As described below, there is an initiative by the VDMA to increase private sector engagement, as well as private sector efforts to start to address these defects in the management of the fund.

Another perceived inherent weakness of the fund is that it is managed by each province. Disasters strike Vietnam unevenly from year to year. A national system whereby contributions were better enforced, shared and distributed to provinces in response to disasters as needed, would be a more flexible and responsive system.

### 3. Stakeholder Assessment: Private Sector’s Role in Disaster Management

After more than five years since the Law on NDPC came into effect, the role of the private sector in DRM is still quite limited. As mentioned in Chapter 2 above, Article 35 of the Law on NDPC clearly stipulates the rights and responsibilities of “economic organizations”. The rights of the private sector include receiving compensation for their supplies and/or equipment mobilized for purposes of disaster responses and receiving compensation for their efforts to prevent disasters in accordance with the authority of the respective government agencies. However, the role of the private sector should not be limited to a discussion on financial contributions and benefits.

The most important role of the private sector at this phase in Vietnam’s development is to inform the government’s making of policies, laws, regulation, and to help assess implementation to guide better preparation, responses and recovery.

Efforts focusing on the private sector, such as increasing the resiliency of businesses, is important. But the private sector, including those businesses that are unregistered, is vast. A “private sector only” approach is too narrow. As described further in this section of the report, effective preparation and responsiveness to the needs of Vietnam’s economy, in all sectors and regions of Vietnam, requires holistic and intensive coordination with the government.

Regarding responsibilities of the private sector under the Law on NDPC, the private sector is required to: proactively protect its respective business interests during disasters; develop and implement the government’s DRM plans; participate in DRM training programs; participate in disaster response, emergency support and recovery efforts within each business’s capacity; and contribute to the DPC Fund. However, the private sector’s role in DRM in Vietnam is mainly voluntary and it is not as effectively utilized as it should be. Private sector businesses have tended to respond and recover from disasters by themselves, and sometimes to help others who have been impacted.

**Role in preparedness and protecting business: The private sector is beginning to pay attention to disaster risk management planning, but more is needed.** The assessment team observed and learned from interviews with local enterprises in Quang Nam and Khanh Hoa that most businesses, particularly small and medium-sized enterprises, have not made DRM plans. In a survey by VCCI and The Asia Foundation carried out in the central region of Vietnam in 2016, the private sector was found not to be paying adequate attention to disaster and climate risk assessments, and not yet proactively developing DRM plans. Only 9 percent of those that had not received training on disaster risk management, climate change and business continuity planning had invested in adequate preparations and, of those who had received such training, only 26 percent had made the necessary investment.<sup>26</sup> The survey results also indicated that the success of DRM planning heavily depends on the private sector’s knowledge.

From 2011 to 2017, a project funded by USAID and implemented by The Asia Foundation in cooperation with VCCI in Central Vietnam trained 3,113 business owners and managers in 20 provinces on disaster risk reduction, and it conducted research on corporate social responsibility for disaster response and recovery, banking and insurance risk, and supply chain continuity. In Long An Province, TAF built an online risk assessment toolkit for businesses. But TAF had to focus primarily on businesses that had or were willing to develop business plans, as they were the ones most likely to develop and implement DRM plans. This unfortunately leaves out many smaller SMEs, particularly in retail and service areas.

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<sup>26</sup> Survey report on “How Vietnam’s enterprises respond to disaster and climate risks”, 2016. The reference number is for enterprises were not received any training under the project “*Strengthening Public-Private Partnerships for Disaster Risk Management and Community Resilience in Vietnam*” by The Asia Foundation and VCCI.

**The private sector needs improved access to information, incentives and coordination with the government to help improve disaster risk planning.** The assessment team found that businesses at the local level not only lack knowledge and awareness on disaster and climate risks, they lack access to, and understanding about, insurance – as well as about the government tax policies that would incentivize formally registering as a business – to mitigate the impact of a disaster on them.

Unregistered businesses represent a substantial portion of the total number of businesses in Vietnam. In Khanh Hoa, the assessment team found that approximately 10,000 local businesses are registered, but over 35,000 are unregistered household businesses. As unregistered household businesses, they are not entitled to tax relief for losses that would be made available to those who are registered. Two businesses with whom the assessment team met in Khanh Hoa reported suffering serious losses from Typhoon Damrey in 2017. They managed to remain in business, but they did not receive any tax benefit, except for being allowed to delay their tax payment, nor any other support from the government for their recovery. They also had not purchased any business insurance, although it was unclear whether any insurance would have been available to them. At least one businessman questioned the value of insurance and reported that he stopped purchasing it because there was no reasonable benefit from it when flooding of his business actually occurred. Such deficit in knowledge and access to support was the norm in both Quang Nam and Khanh Hoa provinces.

The gap in information, incentives and coordination with the private sector can be remedied by a more inclusive policy, law and regulation-making process with the government. As demonstrated by domestic and foreign chambers of commerce advocating for improved policies on such legal and regulatory reforms as trade, labor, energy and finance, the private sector is an effective instigator and facilitator of constructive dialogue with the national government on needed reforms. Consultations with the private sector have a particularly great effect when they include an analysis of the economic impact of a policy, law or regulation.

**Social responsibility role: The private sector is not benefitting from the National Fund for Disaster Prevention and Control (NDPC).** There is an increased trend toward corporate social responsibility, but businesses choose where to direct their support. Since most larger businesses effectively mitigate against the risks of loss from disasters, such as planning for multiple suppliers, they may choose to invest their efforts in social causes other than DRM, such as environmental protection, education, etc. Business are required by law to contribute to disaster response, but implementation is inconsistent. With the majority of businesses being smaller and at risk of substantial losses – if they are able to remain in business at all<sup>27</sup> – following a disaster, and because NDPC funds are managed at the provincial level, it is unlikely that businesses could make significant, additional contributions to disaster relief efforts when they are needed.

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<sup>27</sup> According to VCCI in Khanh Hoa, approximately 10-20 percent of local businesses failed following Typhoon Damrey in 2017.

Article 35(h) of the Law on NDPC specifies that businesses are responsible for contributing to the disaster fund, but many businesses are not contributing in advance. The fund could be improved by: mandating compliance through a government-enforced system of collection of contributions; less demands for additional voluntary contributions; transparency of information on how funds are disbursed; consistency of implementation among provinces; and a national system for sharing funds among provinces at times of a disaster (a disaster never hits all provinces at the same time, so resource-sharing across provinces should be optimal).

Under Decree No.94/2014/ND-CP, on Setting up and Managing NDPC Funds, businesses are obligated to “annually contribute 0.02% of their total value of current assets in Vietnam according to annual financial statements, which, however, must be at least VND 500,000 and at most VND 100 million, and may be accounted as production and business cost.” However, a finding from the Vietnam Chamber of Commerce and Industry (VCCI)<sup>28</sup> revealed that, as of June 2019, two provinces/cities had not set up their fund, eight provinces/cities had not yet collected money and, overall, the fund’s collection capacity had been very low. Only around 14 percent of expected funds had been collected this year, and only 39 percent had been collected over five years. Also, according to the report by VCCI, enterprises want to know how the funds are utilized. VCCI’s findings are consistent with findings during the landscape assessment. Local businesses were not critical of the government’s humanitarian response or of the need to help the poor, but they are interested in a cost-benefit analysis. After paying into the fund, they wondered how the funds were disbursed since they had hoped that some benefit would come back to their own local businesses, which also suffered serious loss during local disasters. Because of the lack of information, local businesses had questions about the fund’s effectiveness as a tool for effectively responding to local disasters when they occur.

Since April 2019, the inclusion of VCCI under the CSCNDPC, under MARD, offers the opportunity to strengthen the voice of the private sector. VCCI has been partnering with donors and private sector organizations such as the Vietnam Business Forum, which includes most foreign chambers of commerce working in Vietnam. With funding from USAID, VCCI has been implementing the annual Provincial Competitiveness Index, an annual business survey that assesses and ranks provinces on competitiveness and promotes a more favorable business environment for national development. Similarly, such an effort to bridge the needs of the private sector and government would help to identify appropriate solutions for improving the NDPC Fund.

**Access to insurance.** An essential element of private sector engagement must be through a robust system of different types of insurance. According to a report by VP Bank Securities, Vietnam’s insurance gross premiums, as a percentage of GDP, are minute compared with other leading ASEAN countries: Vietnam is at 1.5 percent, compared to Thailand at 14 percent and Malaysia at 16 percent. According to insurers, a key obstacle is that they cannot access market data to help set appropriate rates and to manage risk. There is little indication of any insurance products being designed in Vietnam specifically with the SME market in mind. One businessman reported that he had tried flood insurance, but he was quite reluctant to purchase it again since

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<sup>28</sup>Official letter No. 1634/PTM-PC from VCCI to VDMA on the revision of NDPC Law dated July 18, 2019.

the return on its costs was so insignificant. Unfortunately, there are few immediate opportunities to engage with the private sector on an improved insurance system against extreme weather events unless the private sector and government agree to cooperate on a new mechanism that would apply to all businesses nationally, including state-owned enterprises.

According to the Compendium of Disaster Risk Transfer Initiatives in the Developing World, by the ClimateWise Insurance Initiative, a range of functions are required beyond purely private sector insurance; 68 percent are funded through government programs or initiatives (see Box 1 for examples).

**Box 1: Some examples of government funding initiatives for insurance**

- Funding of technical assistance projects
- Financing of scheme feasibility studies.
- Financing the development of tools such as risk and actuarial models.
- Financing the development of new insurance products, and the design and structuring of insurance facilities.
- Funding the provision of education and capacity building.
- Financing the development of infrastructure such as weather station networks.
- Provision of start-up capital, provision of capital support.
- Financing program start-up costs.
- Financing operational costs (e.g. insurer's administrative and operating expenses, loss adjustment expenses, etc.).
- Subsidizing insurance premiums.
- Funding reinsurance.

Public-private partnerships are essential for sharing the risk and develop capacities for effective insurance schemes. Please refer to Box 2 for examples of solutions from other countries. In fact, Vietnam is at its debt ceiling; any future improvements will require investments coming from the private sector. This is only achievable through improved public-private sector coordination.

**Box 2: Examples of Public-Private Partnerships for sharing risks and developing capacities for effective insurance schemes**

- *Ethiopia – Insurance for Work.* Cash constrained farmers have the option to pay for insurance premiums either in cash or through disaster risk reduction work, thus building community resilience.
- *Mongolia – Layered Insurance.* The Mongolian Index-Based Livestock Insurance Project (IBLIP) is a public-private partnership that adopts a formal layering risk management approach where individual herders absorb the first 6% of herd losses; the next 24% is covered by commercial insurance sold at actuarial rates with any losses above 30% covered by the Mongolian Government.
- *Peru – Forecast Insurance.* Peru’s ENSO insurance employs a trigger that pays out based on a seasonal forecast (in this case a flood associated El-Nino climatic event) allowing policyholders time to apply payments to flood mitigation measures. Insurance is enhanced with awareness-raising and educational efforts that aid policyholders understand the best measures to reduce flood risk.
- *Thailand - National Catastrophe Insurance Fund (NCIF).* The NCIF provides reinsurance capacity to heavily impacted domestic insurers at subsidized rates to offer natural catastrophe coverage at affordable rates. At the same time, the Thai government leveraged support from international agencies to propose a number of flood mitigation strategies and action plans, including: local defense; industrial park protection; inner logistic roads; river dredging, dikes and water gates; flood collection areas and infrastructure strengthening; and forestation and dam management. Thailand’s Office of Insurance Commission (OIC) also supports the NCIF through collection of insurer-insured loss and capital data.

**The government should learn and apply lessons learned from earlier efforts to create a workable insurance scheme.** The Government of Vietnam piloted an insurance scheme for agriculture in 2011. However, a review of the program by the Ministry of Finance revealed a number of shortcomings, including the reluctance of households and agricultural organizations to participate in the scheme beyond an “explore as it goes” approach. This experience should be studied further to pilot a more sustainable approach through public-private sector cooperation.

Experiences from the landscape assessment reveal a combination of factors impeding the development of a workable insurance scheme to protect against DRM, including: the purchase of insurance not being required by the government on a national scale; not enough businesses voluntarily purchasing insurance to make it economically viable; the credibility of insurance undermined by complaints of bureaucracy and not being reasonably compensated; and, therefore, a lack of appreciation of the value of the insurance.

#### **4. Small and Medium Enterprises and Supply Chain Resilience**

Until recently, with enactment of the Law on Support of SMEs of 2017, SMEs had not been prioritized for support. Foreign direct investment (FDI) remains the driver of economic growth and economic policy in Vietnam, and FDI companies are better structured to endure economic and environmental shocks. According to MPI Minister Nguyen Chi Dung in 2017, the FDI sector contributed about 25 percent to social investment capital and 20 percent to gross domestic product (GDP). While state-owned companies tend to be larger, FDI companies make up 72 percent of total export value and generate about 3.5 million direct jobs and 5 million indirect

jobs. In comparison, SMEs represent 40 percent of Vietnam's GDP and 51 percent of its labor force. Thus, the resiliency of SMEs is of critical concern for enlarging and sustaining Vietnam's economic growth.

SMEs are predominantly micro-sized (70 percent). A much lesser number are small (26 per cent), and very few are medium-sized (1.9 per cent) within Vietnam's economy.<sup>29</sup> While SMEs represent more than 95 percent of the economy, they account for a much lesser percentage of the gross domestic product; the economy is dominated by state owned enterprises and foreign direct investment (FDI) companies. Even compared to other ASEAN countries, a small proportion of SMEs participate in global supply chains. As a result, SMEs have remained weak,<sup>30</sup> located in communities with weaker infrastructure and greater risks of supply disruptions,<sup>31</sup> and in need of policies that foster their development. Challenges to SMEs include: increased competition; reliance on foreign direct invested companies; poor vertical integration in global supply chains; lack of capital; and limited understanding of laws and regulations.

With the new Law on Support of SMEs of 2017, the National Assembly has sought to improve the legal environment for SMEs. Decree 56/2009/NĐ-CP, on assistance to the development of small- and medium-sized enterprises, focused on supporting new policies on tax, promotion of innovation in SMEs, access to land and industrial zones, access to capital, access to global value chains, and the conversion of household businesses into the formal business sector. However, there remain limitations in the legal framework to incentivize the development of SMEs, including to: produce more skilled laborers; increase productivity; improve infrastructure and distribution; introduce new technologies; attract more investment; develop local markets and higher value products; and respond to changes to the climate and local business environments.

**SMEs are disproportionately at risk from disasters.** SMEs in Vietnam are predominantly micro-sized. Research has indicated, and the field visits during the landscape assessment confirmed, that SMEs in Vietnam tend to function more informally, to be much less prepared for adversity, and less adaptable to recover from disasters. They tend to be embedded in their communities, which means that their exposure to disasters is comparable to that of their respective community. And like their local communities' traditional systems, they tend to rely on good fortune and the goodwill of their community to prosper. The assessment found that when storms or other extreme events, like flooding, hit communities that have had years of experience coping with such events, they are quite resilient. But, for communities that have not been

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<sup>29</sup>ADPC, 2016, Strengthening Disaster and Climate Resilience of SMEs in Asia, Viet Nam component.

<sup>30</sup> The dominant industry groups among SMEs are: wholesale and retail trade (nearly 40 percent); then the service sector, including technology, accommodation, and food services (over 20 percent); and manufacturing (nearly 16 percent).

<sup>31</sup> Interestingly, only 32% and 21% of SMEs surveyed responded that typhoons and floods respectively are their greatest hazards. They rate the top 3 hazards with potential to disrupt their business as: power blackout (41 percent), regional/global economic crises (40 percent), and fire (35 percent).

experienced at coping with such events, the traditional systems break down and the impact on the local communities and SMEs embedded in them can be devastating.

**SMEs are not well connected with supply chains and, of those that are connected, they are disproportionately impacted when supply chains are disrupted.** Because of Vietnam's heavy reliance on foreign direct invested (FDI) companies, supply chains are relatively weak. According to the findings at a recent workshop in Vietnam on "How to become a qualified supplier to foreign firms," the rate of SMEs in Vietnam that connect to foreign supply chains is very low compared with other Southeast Asia countries, for example: 30 per cent in Thailand; 46 percent in Malaysia; but only 21 percent in Vietnam.<sup>32</sup>

Due to the low percentage, the assessment team was not able to meet with any SMEs directly linked to foreign supply chains during the brief visits to the provinces. Of two SMEs who survived Typhoon Damrey, with whom the assessment team was able to meet, both were seriously impacted financially by the disaster. Their supplies were decimated when their roofs blew off, and their access to repairs was impaired. They seemed to be able to recover and to maintain their network of suppliers and purchasers because their local communities were so reliant on their businesses. Local businesses reliant on larger companies outside of their community are particularly vulnerable. Larger companies simply have a list of suppliers; when one supply chain breaks down, they turn to another.

**Businesses in Vietnam are predominantly unregistered and lack adequate government support systems.** The Law on Support to SMEs is designed to encourage informal businesses to join the formal business sector. It defines SMEs as registered businesses. But the majority of small businesses in Vietnam are unregistered, including retail, aquaculture, agriculture, tourism and service sectors generally. This landscape assessment has used the term SME more loosely to refer to both registered and unregistered businesses.

Field visits by the assessment team observed that most businesses are less financially resilient. They lack adequate financial support systems, including: insurance against any form of disaster except fire (fire insurance is required by law); access to finance for their business development; and access to funds for disaster recovery. They are reliant on their own and family resources. When their businesses are wiped out by a disaster, they may lack the ability to start over. While there appeared to be strong community networks during the field visits, SMEs reported that, when financial problems struck following a disaster, they were on their own.

By varying government estimates, there are more than 700,000 registered businesses in Vietnam, but substantially more that are unregistered.<sup>33</sup> Thus, there are varying degrees to

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<sup>32</sup><https://vietnamnews.vn/economy/520890/vietnamese-smes-shown-how-to-enter-the-global-supply-chain.html#ke5xbuTGKH7JAoiW.97>

<sup>33</sup> According to 2018 national statistics, there were more than 741,000 SMEs registered at the end of December 2018.

which: businesses may be able to prepare for disasters; sources of government support and relief that can be made available, depending on whether they are registered; and varying approaches to engaging with businesses. These disparities between registered and unregistered businesses are worth more study as part of efforts improve public-private sector cooperation. In the short to medium-term, in addition to trying to bring businesses into the formal sector, solutions should be targeted to supporting those businesses who are not yet registered, as not doing so poses significant economic consequences.

**Agriculture is particularly vulnerable to disasters.** Agriculture still accounts for nearly 20 percent of Vietnam's GDP, and employs over 40 percent of the population, i.e., most of the rural population of Vietnam. The highest poverty rate is mainly in the agricultural sector. This sector therefore is the most vulnerable to climate shocks and should be prioritized for support. However, designing appropriate policies requires additional research. In addition to drought and salination, agriculture is vulnerable to flooding from both local storms and the impacts of upstream dams.

Representatives from the private sector in Tam Ky, a more rural community west of Hoi An, indicated that floods from upstream dams arrive more regularly and with much less warning. In urban coastal areas, flooding has been aggravated by the impeded flow of water due to urban developments. Local agriculture impacted by flooding has included multiple causes, including: poor drainage and obstructed flow of water; landslides in mountainous regions which flush out low-lying areas; and water release from dams and reservoirs. Local agriculture supply chains are impacted most by: loss of power; and damaged roads and railways, which lead to delays in services and deliveries. The impacts on local agriculture include additional time, labor and expense of restoring the land and planting new crops. While those costs may seem localized following a disaster, the national impact is significant. Special attention should be given to the substantial downstream impact on the national economy from agricultural losses. For example, as noted earlier in this report, primary agriculture was only 15.6 percent of total GDP in 2007 but, when the full agricultural value chain was included, the contribution from agriculture was almost double, or 27.5 percent of GDP.

### *Case Study: Impacts and Opportunities for Building the Resilience of Agricultural Businesses*

Khanh Hoa is an opposite example to Hoi An. Before Typhoon Damrey in 2017, the province had no memory of such a strong typhoon. Therefore, both the government and people lacked the knowledge and experience to prepare (arguably, from discussions during the field visit, better preparation would have mitigated much of the damage experienced) and to respond to this type of disaster.

Of the 15 provinces affected by Typhoon Damrey, Khanh Hoa Province suffered the most, accounting for approximately 69 percent of the total economic losses, most of which was caused by winds rather than floods. According to provincial authorities, Typhoon Damrey caused 45 deaths and 219 injuries. In terms of economic impact, Khanh Hoa lost more than VND 15,000 billion, including an agricultural sector loss of about VND 10,000 billion.

Based on a rapid assessment<sup>34</sup> by the World Bank, GFDRR and the Khanh Hoa Provincial People's Committee in 2018, agriculture was the most severely affected of four sectors assessed: housing, irrigation and flood control, transportation and agriculture. This was confirmed by the Khanh Hoa Farmers Union, i.e., that aquaculture represented the largest losses in the agricultural sector, including 44 people were killed at offshore aquaculture farms during the typhoon. Authorities reported that crop production, livestock, forestry and agriculture-related businesses were also heavily affected.

Much of the damage caused by Typhoon Damrey in Khanh Hoa's Ninh Hoa District was attributable to the fact that the population and the government were not prepared for such a strong typhoon. The costs of reconstruction of housing represented the highest recovery cost. Lack of experience with preparedness and response led to heavy damages and losses, such as the Ngoc Khuong rice processing and trading business. The business faced losses of around VND 6 billion for both the facility and its inventory of rice when its roof blew off (as identified in the circled area in the photo), but also due to the lengthy time it took for road access and electricity to be restored.



Ngoc Khuong is a household business, meaning that, like most SMEs still in Vietnam, it is unregistered as legal business; therefore, when faced with damages and losses after Typhoon Damrey, it could delay its tax payments, but it could not receive the benefit of recording its losses, and carrying those losses forward to future years against its normal tax obligations that

a registered business would be allowed to do. The unregistered SMEs themselves are not aware of this issue.

The assessment team found that, in Khanh Hoa Province, there are more than 10,000 registered enterprises, but more than 30,000 individual/household businesses. As part of the Government of Vietnam's efforts to encourage business to join the formal business sector as registered businesses, the latter are not entitled to the more beneficial tax policies.

On the national level, improved knowledge-sharing on government policies, like tax, and resiliency, from communities like Hoi An, would help mitigate some of the worst effects of disasters like Typhoon Damrey for the individual/household businesses.

**Tourism is impacted particularly by poor early warning systems.** Tourism in Vietnam relies a great deal on long trips from one location to another. Interviews with tour operators indicated that early warning information is not always timely or accurately provided. Examples of warnings not being received timely included: water release from upstream dams; rough seas; and offshore wind conditions. The former affect flooding in coastal areas, and the latter affect services such as passenger boats operating offshore, such as between Hoi An and Cham Island. Poor early warnings result in delays or late cancellation of tours that had already departed from distant cities such as Da Nang. The costs of such delays and cancellations must be borne by travel operators. There was no reference to any of the operators using travel insurance.

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<sup>34</sup>Khanh Hoa PPC, 2017 Vietnam Post-Typhoon Damrey Rapid Damage and Needs Assessment

### *Case Study: Impacts and Opportunities for Building the Resilience of Tourism Businesses*

Hoi An is accustomed to facing typhoons and floods. Local authorities reported, and local businesses confirmed, that floods in Hoi An are increasing annually at varying scales of severity, but typhoons are less frequent. In general, Hoi An's people and business are familiar with floods, and they know well how to cope. As shared by the Hoi An DRM authority, in the last 100 years no one was killed there due to a flood.

Local businesses interviewed confirmed that they are so familiar with floods that they always have plans in place for a response. Businesses reported that they appreciated the timely and proper response from the government to the poor and local communities but did not have the same feeling about the government's response to local business. All businesses representatives interviewed in Quang Nam and Hoi An confirmed that they are normally self-reliant tracking weather forecasts, proactively preparing themselves and responding.

However, the landscape assessment found that most SMEs in the area have not prepared a comprehensive disaster response plan, nor do they know how to prepare one. At the local level, businesses have not yet participated in a local committee for disaster response. However, the local authorities in Hoi An encourage tourist businesses to support each other when disasters strike. For example, hotels at higher locations receive guests from flooded hotels. The local government also gives highest priority to ensure road access to tourist destinations after disasters. The local businesses and government authorities interviewed appreciated what Hoi An has done, but they all agreed that coordination and cooperation between government and businesses on disaster response should be improved and strengthened.

Hoi An has learned to build resilient systems and rapidly respond and adapt; or by having enough money saved and available from friends and family rebuild; or by being part of a community with a strong support network. Most tourist companies and hotels have their own disaster response plans and well arrange for their actions when disasters come. For example, Vinh Hung Group often experiences flooding, at times as high as two meters (as indicated in the photo below). As noted by its manager, Ha Nguyen Han, Vinh Hung Group owns seven hotels and resorts in Hoi An, and has a disaster response plan<sup>35</sup> prepared annually with response tasks assigned to every team in various sectors/divisions/locations. The plan is also flexible to adapt to the real conditions of events when happening. The group is ready with its own boats to evacuate guests and staff when needed. Hoi An's local knowledge and experience becoming flood resilient is a model that should be shared and learned by other locations.



**Local small and medium sized businesses lack effective government support systems.** Local businesses in Vietnam tend to focus on short-term profit – based on their desire to develop economically – instead of on long-term risk. According to The Asia Foundation, SMEs have been largely excluded from programs aimed at building community resilience to climatic events, despite the fact that disasters stretch their resources and the capacity to recover. VCCI reported that a significant majority of Vietnamese business lack access to information on the risks of natural hazards.<sup>36</sup>

Unlike large companies, small and medium sized companies tend to be embedded in their communities, making their awareness and exposure to natural and other large-scale local hazards similar to that of their communities. Specific barriers noted by SMEs include: lack of awareness until they experience a loss first-hand; lack of understanding of disaster risks, the value of mitigation, and the potential impact on income; the perception that the government will help them (businesses seemed surprised, if not hurt, that they received no support from the government); insurance is too expensive; and challenges accessing finance to fund mitigation efforts or to recover. SMEs seemed unaware of the tax impacts of remaining unregistered in the event of losses from disasters. SMEs seemed to be unaware that, if unregistered, they would not be entitled to such tax relief, i.e., to offset their tax obligation.

**Local small and medium sized businesses are not motivated to purchase insurance against disasters.** Insurance is relatively new in Vietnam, and SMEs prefer not to invest in it. Some businesses interviewed reported that they tried insurance but were disappointed, and thus quit purchasing it. Even among larger companies, only about 8 percent claim to be purchasing natural catastrophe insurance. Top preferred coping mechanisms cited by local businesses for recovering from business disruptions and emergencies are: using their own savings (47 percent); support from family and friends (40 percent); bank loans (38 percent); and reducing expenses (36 percent).<sup>37</sup>

**Local small and medium sized businesses have poor disaster risk management strategies.** Almost 40 percent of small and medium sized businesses have reported that they had no written business continuity plan. Large firms interviewed about how they manage their risks have reported that they manage in a range of ways depending on the organization and type of risk, including “direct collaboration with the SMEs, regular meetings, contractual obligations, technical design, insurance, using the international market for supply backup and maintaining a portfolio of SMEs who can supply the same good or service as a back-up measure.” According to a report on “Business Disaster Risk Management in Vietnam: Interaction Within a Supply Chain”, “two key drivers for risk management practices among large firms are experience of disruption

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<sup>35</sup> This is different from a “business continuity plan”.

<sup>36</sup> Report on Central Vietnam Disaster Prevention Support Fund, 2012.

<sup>37</sup> Strengthening Disaster and Climate Resilience of Small & Medium Enterprises. In Asia, iPrepare Business Facility, published by the Asian Disaster Preparedness Center (ADPC). 2016, page 19.

to the supply chain and the recognition that SMEs in Vietnam have poor disaster risk management strategies.” The report noted that the top three incentives that SMEs say they need from the government to encourage them to be more disaster resilient are: tax credits, deductions, and exemptions; subsidies, grants, and soft loans for disaster preparedness; and technical assistance, consultancy service and training in business continuity preparation and disaster preparedness.<sup>38</sup>

## 5. Quick Recovery of Critical Infrastructure

The landscape assessment examined the impact of, and response to, disasters from the perspective of its critical infrastructure, i.e., assets of strategic importance to a nation or community such as telecommunication, ports, airports, roads, transport hubs, water and sanitation, electricity, etc. Such services are essential to the effective functioning of society. Although critical infrastructure is similar in all nations and communities due to the basic requirements of life, the infrastructure deemed critical can vary according to a community’s or sector’s needs and resources. This landscape assessment only focused on those considered critical for the agricultural and tourism sectors at two selected studied areas, Quang Nam and Khanh Hoa Provinces.

### **Vietnam’s government recognizes and understands the importance of critical infrastructure.**

Article 15 of the Law on NDPC provides that the first task of every natural disaster prevention and control plan is “assessing and annually updating ... infrastructure characteristics of the locality”. Also, Article 30 prioritizes “repairing, restoring and upgrading natural disaster prevention and control works, transport, communication, irrigation and power works, schools, health establishments and public infrastructure facilities”.

Authorities and representatives from communities that the assessment team had the opportunity to meet confirmed that critical infrastructures, such as road, rail and shipping networks and electrical supply, normally quickly recover after disasters if damaged. However, the quality and timing of the recovery depends on the level of impact/damage and capacity and resources at the local level. For example, cleaning mud or clearing obstacles from a main road after a flood and storm may take a short time, but fully rebuilding electrical networks and restoring electricity to a community may take up to two weeks, as was experienced in Quang Cu Village, Ninh Trung Commune, Ninh Hoa District, and in Khanh Hoa Province after Typhoon Damrey in 2017.

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<sup>38</sup> Report not yet published by The Asia Foundation, Hanoi, Vietnam.

#### IV. POTENTIAL FOR A PRIVATE SECTOR NETWORK ON DISASTER MANAGEMENT

The CBI provides guidance on two alternatives for how to develop a private sector network: to develop an independent organization; or, more normally, “a platform or initiative hosted within a larger organization.”<sup>39</sup> Experiences of organizations and projects in Vietnam have demonstrated that the former, i.e., development of an independent organization, would require an extended period of time due to challenges of registration and building cooperation among multiple government stakeholders. Therefore, the preferable solution in Vietnam would be to build an initiative within an existing or emerging private sector network.

The landscape assessment has established that there is a need for a private sector network. Based on findings from the landscape assessment’s desk research, field trips and consultative workshop on 3 July 2019, there are three alternatives for improving public-private sector cooperation in Vietnam:

- 1) Cooperation with NGOs or the existing Corporate Engagement Working Group (CEWG) and/or Disaster Management Working Group under the Vietnam Union of Friendship Organizations (VUFO)-NGO Resource Centre;
- 2) A new private sector working group working under existing, successful organizations working together such as VCCI, The Asia Foundation and/or Vietnam Business Forum (a network of local and foreign chambers of commerce); or
- 3) An expanded partnership under the Vietnam Disaster Risk Management (VDMA)/Ministry of Agriculture and Rural Development (MARD) through a new agreement on Disaster Risk Reduction Partnership. The Partnership was recently established per an agreement between MARD and UNDP, pursuant to the Government of Vietnam’s approval in Document No. 4586/VPCP-QHQ, of May 29, 2019, of the Office of the Government. Per Article 1, sections a) and b) of the agreement, the Partnership is intended to “promote the strength and comparative advantages of domestic and international organizations and individuals in order to effectively implement natural disaster prevention and control measures, minimize human and asset losses, protect the environment, and contribute to sustainable socio-economic development.” Specific objectives include “development of an open forum to strengthen cooperation, improve coordination effectiveness, promote sharing of information and experiences in implementing initiatives, policies, investment, researches, science, and new technology solutions for natural disaster prevention and control in Vietnam;” and “participation of domestic and international organizations and individuals in the field of natural disaster prevention and control.”

All three alternatives have advantages and disadvantages. The CEWG tends to be dominated by NGOs and to lack influence to effectively liaise directly with the government. Private sector working groups, while offering much long-term potential, will be difficult to establish and sustain

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<sup>39</sup><https://connectingbusinesses.wixsite.com/foundation-guide/ch-3-question-3>

in the short-term. Alignment with a non-government organization (NGO) or working group has advantages, but it may pose challenges scaling up a sustainable private sector membership and to engage effectively with the government on disaster risk management, particularly with the Ministry of Agriculture and Rural Development (MARD). The new Disaster Risk Reduction Partnership has the potential of bringing private sector influence into government decision-making, and it offers the opportunity to advocate directly with the VDMA, but it is a new agreement.

Working through NGOs or working groups would take too long to scale up. The Vietnam Chamber of Commerce and Industry (VCCI) is a large organization that is already actively engaged with the government on various public and private sector initiatives, but working with VCCI alone poses challenges to creating an expansive and inclusive membership, including SMEs, and to giving a long-term focus specifically to disaster risk management. A sustained focus on public-private sector coordination on disaster risk management specifically should be led by a broad-based private sector membership, with the active buy-in and cooperation of the government. Cooperation through the VDMA offers the best immediately implementable approach to build a participative private sector network through its newly established Disaster Risk Reduction Partnership.

The following section provides initial guidance on how to move from the concept of working through VDMA's Disaster Risk Reduction Partnership to a fully functioning private sector network comparable to CBI efforts in other countries.

## 1. The mission, objectives and scope of the private sector network

**The mission and purpose of a private sector network is to guide overall strategy.** A private sector network should ensure a focus on shared goals among private sector organizations, government partners, donors, and other stakeholders. The CBI Network Foundation Guide provides that the network should address the unmet needs of the private sector to be able to engage with the government on disaster risk management and to identify the most valuable contributions the network could make. Based on recent reform experiences in Vietnam, the most urgent mission of the newly established VDMA Disaster Risk Reduction Partnership would be to strengthen the voice of the private sector in the development of new policy, laws and regulations relating to DRM.

Based on the findings of this landscape assessment, a private sector network in Vietnam focused on improving policy, laws, and regulations relating to disaster management is feasible. Based on the field visit and feedback from participants at the consultative workshop, the primary mission of the private sector network in Vietnam would be to facilitate regular public consultations on a broad range of reforms in respect to DRM. This would be comparable to recent requirements to facilitate increased public-private sector consultations, such as: the WTO Trade Facilitation Agreement ratified by Vietnam in 2017; and the mandatory policy impact assessment process mandated by the Law on Legal Normative Documents of 2015. Public-private consultations have been implemented successfully in recent years during policy impact assessments by multiple

ministries, including the Ministry of Planning and Investment (MPI) on the Law on Support of SMEs and the Ministry of Finance on tax and customs regulations.

**The objectives of the private sector network include knowledge sharing, provision of services, and standard setting.** The objectives of the private sector network through the VDMA Disaster Risk Reduction Partnership should be a combination of: inviting broader private sector participation; facilitating discussions on issues of national importance at public fora attended by the media to facilitate national dialogue; creating regular fora for the private sector to express policy needs, and for government leaders to make policy statements; and influencing the development of new policies, laws and regulations. These are best accomplished by opening participation to private sector organizations with local and international comparative experience that can advocate effectively at local, provincial and central levels of government, and that have demonstrated that they can actively contribute to dialogues with the government.

**The scope of engagement must be at both the national and local levels.** An expanded private sector network through the Partnership must ensure the participation of local leaders, all sizes of SMEs, and reflect the full range of local contexts from province to province, all of which may not always be appreciated if dialogue is limited to the central level of government. Locations in the field for public consultations should be selected where local issues amplify critical issues being examined at the higher levels. Secondly, consultative discussions, i.e., on new policies, laws and regulations, should be facilitated within the context of a new law or implementing regulations, and throughout the period of their development. For example, as a beginning point VCCI has officially submitted to the VDMA recommendations on revisions to the Law on Disaster Risk Management, including substantially revising policies governing the disaster fund.

## **2. The network model including the governance structure and hosting arrangement, vis a vis the local context of Vietnam**

At this early stage, the private sector network model may not yet be familiar to the Government of Vietnam in relation to disaster preparedness, response and recovery, but public-private sector cooperation has become very familiar to the government for addressing issues such as trade and improving the business environment. Hence, the risks of disasters to businesses in Vietnam, and the disproportionate impact of such risks to the country's registered and unregistered businesses, should resonate to the government and private sector alike in the context of sustaining Vietnam's economic growth. As noted in this report, the impact of disasters on communities which are not adequately prepared can have serious consequences on the entire national economy. The Disaster Risk Reduction Partnership should be utilized to expand participation of a broad range of private sector representatives impacted by disasters, and who could provide valuable insights and advice from their experiences in Vietnam as well as comparative experiences from other countries.

### **3. The potential champion corporations and institutions for the network**

As noted above, CBI recommends that a network begin as a platform or initiative hosted within a larger private sector organization. The private sector organizations most experienced, best prepared, and having the greatest capacity to facilitate constructive dialogue with the government include VCCI, which is already facilitating a number of projects with donors and the government nationally. VCCI has been partnering with international donors for several years on issues impacting businesses and the economy, namely through the annual Provincial Competitiveness Index (PCI) and the Vietnam Trade Facilitation Alliance in cooperation with the American Chamber of Commerce of Ho Chi Minh City. In respect to disaster risk management, VCCI offers the advantage of already being a member of the VDMA. Therefore, the VDMA Disaster Risk Reduction Partnership should capitalize on VCCI's influence. However, it is essential for the Partnership to expand its membership and/or representation and to be inclusive of the perspectives and experiences of SMEs, NGOs or social organizations, corporations, and other private sector institutions and individuals.

### **4. The potential roles of the network in various phases of disaster management**

From field visits, the assessment team observed that resiliency can be learned and applied effectively in Vietnam. Cities like Hoi An have a long, successful history of demonstrating a community's capacity to respond rapidly to major storms and floods and to return to business without any significant loss of belongings or life. In communities like Khanh Hoa, efforts to improve mitigation, preparedness, response and recovery in advance would help manage disasters and reduce the long-term environmental and economic impacts.

In particular, mitigation efforts have been lacking, such as stricter standards for: withstanding typhoon-force winds, managing flood areas, not impeding the flow of water; and protecting locations against floods, winds and storm surges (e.g., for aquaculture). Of course, not all damage can be mitigated, and in such instances better systems of insurance and disaster relief funds are needed. But some communities in Vietnam have demonstrated that they can learn to become more resilient. The VDMA Disaster Risk Reduction Partnership should invite more private sector input and facilitate the development of the CBI network to share knowledge and spread lessons from both the private sector and resilient communities, which have learned and evolved over a period of many years, to other businesses and communities. Lessons to be shared include: better planning, such as business continuity plans; self-imposed construction standards; escape routes and evacuation plans; community communication networks, including through social media to augment national early warning systems; regularly practiced disaster responses; and new mechanisms and incentives for joint public-private sector coordination.

Lessons from all communities, both prepared and unprepared, should be applied through the VDMA Disaster Risk Reduction Partnership to inform local and national policies, laws and regulations, as well to improve coordination across provinces.

## **5. Strategy for developing the network's membership base**

There are burdensome and lengthy requirements for new organizations to become established and to begin working in Vietnam. Therefore, the Disaster Risk Reduction Partnership offers an existing private sector network. whereby multiple existing organizations and networks in Vietnam, many of which have their own broad membership base, could be accessed as resources, including: Vietnam Association of Small and Medium Enterprises (VINASME); local and international chambers of commerce; and local associations of businesses that rely on SMEs that are well integrated vertically and must maintain reliable supplies of products, such as the: Vietnam Association of Seafood Exporters and Producers (VASEP); Vietnam Textile and Apparel Association (VITAS); and Vietnam Leather, Footwear and Handbag Association (LEFASO); Vietnam Tourism Association (VITA); among others. However, the most effective private sector advocacy groups for broad policy, legal and regulatory reforms in recent years have been those with effective cooperation with a government ministry. Hence, the VDMA Disaster Risk Reduction Partnership could be a highly valuable catalyst for development of the CBI network.

Vietnamese business associations have been effective partners on sector-specific reforms. However, they tend not to be unified. On the other hand, there are approximately 400 business associations representing various sectors under VCCI, but it would be seriously challenged to: develop a specialized private sector network within a short period of time; ensure a broad representative membership; and sustain the network long-term without outside support.

The Partnership could seed a growing public-private sector partnership, with the potential for immediate impact and sustainability through the shared support of the government and the private sector.

## **6. Strategy for building partnerships, including inclusion in the national as well as the UN disaster management structures**

As mentioned above, the CBI network should be established based on an existing entity that has already facilitated effective public-private sector coordination. The VDMA's Disaster Risk Reduction Partnership is new, but it offers the potential to be expanded to encourage engagement by more stakeholders with the government on DRM. Partners should include all organizations that can provide input on DRM efforts, including VCCI, Vietnam SME Association (VINASME), The Asia Foundation, the CSCNDPC and related government agencies, NGOs or social organizations, chambers of commerce, and the Vietnam Business Forum. The Disaster Risk Reduction Partnership also requires extensive coordination at the level of the Prime Minister's Office, National Assembly, ministers, provincial governments and People's Committees.

## 7. A one-year workplan incorporating the initial activities of the network, and an impact measurement framework and metrics

A feasible one-year work plan could be structured as follows:

**Table 1: Suggested feasible one-year work plan for the potential network**

No.	Activity	Suggested Timeline	Expected results	Measurement
1	Identifying the focal point agency	Month 1	A suitable local organization is selected as the network focal point in Vietnam	The organization is identified that is willing to accept the role
2	Setting up the network (CBI) in Vietnam	Months 2 to 3	CBI network is set up under the leadership of the local focal point agency	The defined network is set up and ready to run
3	Building up the network of members with a defined purpose and objective	Months 3 to 5	All relevant members are invited to the network with a common objective	Sufficient members with a plan of activities in country
4	Organizing a kick-off network meeting for introducing and discussing the way forward for the network	Month 6	A kick off workshop is organized, and plans agreed	Members agree on the way forward of the network
5	Starting a series of defined activities in country	Months 6 to 12	The series of activities is organized	The series of activities are completed with plans for next steps

## 8. Building capacity to receive and disseminate early warning information on floods and typhoons from existing sources

As noted during the field visit and meetings with members of the community, the Government of Vietnam does have an early warning system for anticipated flooding. Early warnings based on real time data could be improved in two ways: to monitor weather events, particularly offshore; and issue warnings more instantaneously using online resources.

A few persons interviewed noted that strong winds are difficult to predict. One tour operator reported that warnings come timely enough to prevent tour boats from going out to sea, but not soon enough to avoid financial losses from trips being cancelled. Several interviews reported that offshore winds can be unpredictable and that even smaller winds can generate large waves.

Additional studies are merited to examine if offshore weather patterns could be better tracked and predicted with satellite and other data, such as the WINDY application.<sup>40</sup>

The most serious challenge reported by communities in Quang Nam province was the increased occurrence of flooding. However, the flooding is less the result of offshore storms and more normally the result of inland rains that require dams upstream to release water. The warning systems for such floods are more informal, and not timely enough for those closer to the dams. Residents and businesses in Tam Ky reported that there is little to no warning when the river begins to rise. At least one business in Hoi An reported that colleagues in Tam Ky inform them when the river begins to flood, thus giving them time to prepare. Another business reported that the local government leader, Mr. Hung, Vice Chairman of Hoi An City, shares notices of coming floods on his Facebook page. These local innovations are good examples of how resilient communities like Hoi An are able to prepare and adapt through local innovations. However, it is worth further study how information technology could be applied to detect an increased discharge of water from each dam upstream or a rise in the level of the river. For example, water level gauges connected to a monitoring network placed upstream of rivers could push warnings to mobile phones in the region.

The best approach for influencing improvements in early warning systems is through structured, improved coordination between the public and private sectors to: develop better laws and regulations; facilitate coordination among national ministries, provincial Peoples' Committees, and others engaged in the construction and maintenance of upriver dams; and centralizing information management so that real time information is made available immediately to all government entities, citizens and businesses simultaneously. Improving partnerships between the public and private sectors under VDMA offers the most effective means for facilitating this coordination.

## V. CONCLUSION AND RECOMMENDATIONS

Disasters in Vietnam, namely typhoons, floods and other extreme weather events, are increasing both in frequency and intensity. Because of climate change, weather patterns are changing. Thus, both coastal and inland areas that were not prone to serious weather events in the past must now be prepared, including protecting themselves against heavy rains, strong winds and flooding. Secondly, other environmental changes will aggravate flooding, including: less absorption of soil due to deforestation and more severe dry seasons; higher sea levels; massive urbanization; and increased hydropower upriver, which can lead to flooding even when storms are farther away. Along with the increase in extreme weather events, the economic losses due to climate and disaster risks are increasing on a clear trend both at local level and national level, which must be mitigated against.

There is an abundance of laws and regulations, but there is room for improvements in implementation. For example, a fund was created to support responses to disasters, but only

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<sup>40</sup><https://earth.nullschool.net/#current/wind/surface/level/orthographic=-253.58,17.94,1973/loc=91.983,20.757>

about 39 percent had been paid into the fund after five years of implementation, and it has been implemented without a clear understanding on how the funds are utilized. As a result, private sector confidence and the credibility of the fund are undermined.

In other instances, there are inconsistencies in the legal and regulatory environment. For example, every business is mandated to purchase fire insurance and there is an abundance of fire extinguishers, but there is no requirement to purchase storm and flood insurance, nor standards on construction to protect against flooding and high winds.

There is a disproportionate impact of storms and flooding on SMEs. Those that survived such events have done so either: by being part of a community, such as Hoi An, which has learned to build resilient systems and to rapidly respond and adapt; by having enough money saved and available from friends and family to rebuild; or by being part of a community with a strong support network. But even this has not been enough for many SMEs. Hence, in provinces like Khanh Hoa, whose communities were ill prepared for an extreme weather event, an estimated 10-20 percent of SMEs failed.

SMEs are not yet well integrated into vertical supply chains in Vietnam. Larger companies have developed systems for simply turning to other sources when one supply chain breaks down. A large portion of SMEs continue to operate as informal businesses instead of being formally registered. Furthermore, until registered, SMEs do not get the tax benefits available to registered companies if they suffer a financial loss. This was a concern that the Government of Vietnam sought to address with the Law on Support to SMEs of 2017, but the process of bringing SMEs into the formal sector in Vietnam is likely to be a lengthy process that will continue to put SMEs at risk, and may require some interim measures by the government to prevent more SMEs from failing.

Infrastructure in areas experienced at responding to disasters seems to be more adaptable to recovering. Urban areas are also more adaptable than rural areas. Perhaps from a combination of being a closer-knit community and having the practice of regularly responding, they are better able to return to normal within a reasonable period of time. The areas where infrastructure was most impacted, and look longest to recover, was in communities most rural and least experienced at planning and responding to storms. However, the most prevalent cause of damage and the inability to recover quickly was from poor structures that could not withstand high winds, such as roofs blowing off and electric and light poles falling. More preventative measures, such as stronger standards for structures is recommended.

Better coordination among government and donor responses, and improved funding and disbursements of disaster funds, could have a significant improvement. For example, the Vietnam Bank for Social Policies, with which The Asia Foundation, Institute for Social and Environmental Transition (ISET) and Danang Women's Union are cooperating, has made more than 300,000 loans to households whose homes have been damaged by disasters. Such programs are beneficial to SMEs because homeowners are also frequently the owners of a small businesses. Thus, the home in many instances is also the warehouse, the bank vault, and place of business.

Recent experience in Vietnam has demonstrated that necessary reforms in laws and government policies and regulations have been the result of active private sector engagement. This has been most true in economic reforms. The same economic approach could be leveraged to improve Vietnam's planning and response to disasters. Actions by the Government of Vietnam, such as the recent Law on Support to SMEs and efforts to join new free trade agreements, some of which include provisions on support to development of SMEs, have demonstrated its commitment to sustaining economic growth and including SMEs as an essential part. In addition, provinces are competing to attract foreign investment. Thus, the CBI network should leverage these efforts and opportunities by engaging with the private sector for the simple reason that an economy that is not resilient against extreme weather events is not a sustainable, strong economy.

A weakness in improving policy-making has been the limited capacity to make informed decisions due to the lack of data, such as on extreme weather events and economic losses, that can be aggregated at the national level and disaggregated at the provincial and local levels. Without such comprehensive data, it is difficult to tailor appropriate policies and laws. Therefore, the CBI network should also leverage cooperation among the government and businesses to define data needs and advocate for improved collection of data across government ministries and all provinces, and in respect to both registered and unregistered businesses.

Recommendations for improving public-private sector coordination include:

1. ***A bottom-up approach to strengthen the resiliency of communities***, such as: practicing community responses comparable to how Hoi An mobilizes as soon as it receives news of a coming flood; public education on the danger of high winds and storms surges, and potential flood paths; and improved guidance to citizens and SMEs on building stronger structures (although some persons interviewed argued against more government regulations for citizens).
2. ***Improved regulation and enforcement of construction of infrastructure***, such as roadways, drainage and large developments like high-rise buildings and resorts. This would include: higher standards for construction of roofs and utilities; improved enforcement of disaster risk assessments; a Law on Drainage; improved urban planning; and improved management of coastal areas and upstream reservoirs to ensure that the flow of water from storms, including upriver, is effectively managed.
3. ***Improved policy-making at both the national and provincial level***, including: better oversight, management and accountability of the Disaster Prevention Fund; transition to private sector insurance against storms and floods; and a program to offer some form of tax relief to SMEs that have not yet registered short-term, while continuing to urge them and all household businesses to transition to registering officially as businesses; and

improved coordination between the private sector and the government to guide appropriate decision-making.

4. ***Improved utilization of information technology*** so that: offshore wind and storms are more accurately tracked and reported nationally (e.g., so far-off cities can warn persons about travel plans, and fishermen and farmers can make appropriate preparations, further in advance); releases of water from hydro-power dams upriver is tracked and shared in real time; and alerts are issued both through conventional manners and through social media and other online resources so that knowledge is widespread and immediate.
5. ***Improved private sector participation in DRM***, seizing upon private sector actors already making headway engaging directly with the government.
6. ***Increased public education on DRM*** focused on local businesses, including those that are unregistered, focusing on preparation and mitigation against extreme weather events.
7. ***Improved implementation of a workable and transparent system of disaster fund management.***

Effective public-private sector coordination is essential to achieving all of these recommendations in a timely, effective and sustainable manner. The new Disaster Risk Reduction Partnership – if implemented in an open and inclusive manner, and with the support from the CBI network – offers the potential for making Vietnam economically stronger and more resilient in the future.

## ANNEXES

1. ToR of the Landscape Assessment
2. Database of chambers, corporations and entities engaged in disaster management
3. Database of laws and legal frameworks
4. Database of government institutions, international actors and partners working with private sector entities on disaster management in Viet Nam
5. Set of existing tools in Vietnam that can help private sector work on disaster management
6. Other relevant information and databases from the conduct of the landscape assessment.

## **ANNEX I**



*Empowered lives.  
Resilient nations.*

### **TERMS OF REFERENCE**

**Title:** Landscape Assessment on Private Sector's Roles on Disaster Management in Viet Nam  
**Location:** Vietnam, travel would be required  
**Duration:** April – August 2019  
**Report to:** UNDP Emergency and Recovery Program Analyst  
**Technical Supervision:** UNDP Senior DRR/CCA Advisor

#### **I. BACKGROUND INFORMATION**

Viet Nam is a Southeast Asian country with a population of 95.5 million spread across a land area of 330,951 km<sup>2</sup>, a population density of 283 person per km<sup>2</sup> and urban population of 35.2%. The country has a total Gross Domestic Product of USD 589.7 Billion and a GDP per capita of USD 6,172 (as of 2018).

The private sector currently accounts for the largest share of Viet Nam's economy's investment capital at 40.5% as of 2017, followed closely by the state at 35.7% as of 2017<sup>41</sup>. It also has about 500,000 active enterprises, of which 95% is small and medium enterprises (SMEs). As a whole, SMEs contribute 40% of the total GDP of the country and employs 51% of workers (as of 2015).

Agriculture is still the major employer in Viet Nam, particularly in rural areas. Vietnam's agriculture reached an export value of US\$36.5 billion in 2017, and sector growth of 3.05% expected, export value in 2018 was approximately US\$40.5 billion.

Tourism is also a major contributor Viet Nam's growing economy, and is highly dependent on critical infrastructure like roads, ports and airports, is also a significant contributor to the country's income. Tourism accounted for 5.9 % of national GDP in 2017 (USD 12.9 Billion)<sup>42</sup>. In 2018, Viet Nam received 12,922,151 international tourist arrivals<sup>43</sup> resulting in significant

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<sup>41</sup> Source: <https://www.pwc.com/vn/en/publications/2018/pwc-Viet-Nam-future-of-asean-Viet-Nam-perspective.pdf>

<sup>42</sup> <https://www.wttc.org/-/media/files/reports/economic-impact-research/countries-2018/Viet-Nam2018.pdf>

<sup>43</sup> <http://Viet-Namtourism.gov.vn/english/index.php/items/12453>

contribution to direct and indirect employment totaling to 4,061,000 jobs or 7.6% of total employment.

### *Hazards and Disasters*

Viet Nam's cities, population and economy are exposed to the impact of small but frequent as well as large scale disasters especially those caused by typhoons and flooding. According to the Centre for Research on the Epidemiology of Disasters, Viet Nam recorded a total of 101 typhoon-induced disasters and 80 flood induced disasters from 1916-2016.

In 04 November 2017, Viet Nam's deadliest storm of the year, Typhoon Damrey, has severely affected 15 provinces across the Central and South-Central regions of the country, causing widespread flooding and destruction. An estimated 4.3 million people are affected, including 400,000 people who require humanitarian assistance<sup>44</sup>. The losses amounted to VND 22,679 billion (roughly USD 1 Billion)<sup>45</sup>.

## **II. OBJECTIVE AND SCOPE OF WORK**

UNDP Viet Nam is working with the global Connecting Business Initiative to undertake a landscape assessment to gain a better understanding of the private sector needs and opportunities in Viet Nam in the context of disaster risks.

The results of this assessment will be used to complement existing studies in Viet Nam and will provide analytical inputs for policy makers. It may also potentially support scale-up of private sector partnerships on disaster management in Viet Nam, laying the foundation for strengthened private sector networks on disaster management in Viet Nam.

The landscape assessment will focus on the following areas relevant to the context of the country:

### *1. Disaster Risk Assessment*

The landscape assessment will look at the disaster trends and the past and potential impacts of different types of hazards in Viet Nam, especially typhoons and floods, and how small but frequent and large-scale disasters induced by these hazards directly and indirectly affect the economy and businesses, including business operations, assets, supply chain, and personnel and other key elements of the private sector.

Given the nature of the predominant hazards in Viet Nam, the landscape assessment will focus on existing risk data, scenarios and studies on typhoons and floods, as well as early warning

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<sup>44</sup> <https://cerf.un.org/news/story/cerf-releases-us-4-million-help-people-affected-typhoon-damrey-viet-nam>

<sup>45</sup> [VDMA. 2017 Annual Disaster Impact Report.](#)

systems and other relevant disaster management tools developed for the country, their features and how these are being utilized by the private sector for building disaster resilience, disaster preparedness and response, and recovery.

## *2. Policy and Institutional Analyses*

The assessment will include gathering and analyzing the existing government policies and legal frameworks on disaster management (resilience building, preparedness and response, and recovery) especially those that affect the participation of or impact the private sector, as well as map out the roles and opportunities for the private sector specified within these legal documents.

Private sector, depending on its size and nature of business, are differentially involved in disaster management issues. The roles of private sector will be different in response, recovery and preparedness. The business continuity plans will be critical during response phase, innovations in risk reduction will be important in recovery phase, and development investment will be the key in preparedness activities.

With a balanced approach of legislation, incentive mechanisms, and role of other stakeholders, e.g. civil society, media, the private sector's engagement will also be important for legislation issues in the engagement process. It should be noted that private sector can play a major role in the international level for framework development; can influence policy and legislation development at national level by participating in national platforms and can also influence local authorities through urban related issues-such as business continuity or safety standards-and rural development businesses. Therefore, a much closer interaction between private sector and government is needed to ensure appropriate risk reduction strategies, adequate measures for implementation of protection and security measures.

The assessment will also map out the government institutions and international actors and partners working with the private sector in various phases of disaster management (before and after a disaster). These sets of information will be used to determine current capacities, as well as identify opportunities and gaps for private sector engagement on various phases of disaster management.

## *3. Stakeholder Assessment: Private Sector's Role in Disaster Management*

The assessment will also look into the past and current roles of the private sector entities in disaster management in the context of Viet Nam in terms of 1) building disaster resilience, 2) disaster preparedness and response and 3) recovery. This is to identify the major actors from the private sector (champions), the types of support and actions previously done, the setup of providing support, the key partners and stakeholders, the gaps and opportunities for private sector engagement in disaster management.

The report should analyze the role of the public sector and private sector in disaster communication, risk reduction, and risk transfer. This should include looking at the framework of disaster financing, including opportunities and policy frameworks for disaster insurance. The study should also highlight opportunities and challenges in providing protection against disasters. This should include highlighting opportunities to improve public-private partnerships for disaster financing particularly in the areas of disaster communication, risk reduction and risk transfer. It should also briefly document specific local good practice by individual firms/corporations or other relevant stakeholders.

#### *4. Small and Medium Enterprises and Supply Chain Resilience*

Given the large number of SMEs in Viet Nam, they have become more integrated in the local, national and international supply chains and their resilience will be of great advantage to the country. The assessment will look particularly at the effect of disasters on SMEs particularly those that support the large corporations in Viet Nam, as well as their resilience strategies of SMEs and corporations, in order to analyze the existing practices and gaps in supply chain resilience.

More specifically, agriculture and especially the manufacturing of food products and beverages and tourism sectors will be highly critical in these analyses mostly due to their strong backward and forward linkages, their strong interlinkages with local and global production networks, their significant share in overall income and their labor-intensive characteristics.

Furthermore, it is also important that by focusing on these sectors, economic structures of regions/provinces will be effectively monitored, and necessary policy prescriptions will be provided for these regions/provinces development prospects in an analytical framework. Last but not the least, formality and informality in private enterprises-especially SMEs-will be examined to understand the current picture and to develop appropriate policy tools to ensure their sustainability in their business activities including production networks.

#### *5. Quick Recovery of Critical Infrastructure*

The assessment will also look into the resilience building, disaster mitigation and preparedness measures as well as preparation for quick recovery of both government and privately owned and operated critical infrastructure, particularly those where private sector entities rely on for its normal operations and during emergencies. To narrow the focus, this can be done for a particular major city in the country where a large percentage of the national private sector entities are concentrated, and will look mainly at likely recovery of infrastructure: telecommunication and transportation (ports, airports, roads, transport hubs, etc) and water and sanitation

### III. METHODOLOGY

UNDP expects that the consultants follow a qualitative approach and utilize a mix of data collection tools such as desk review, interviews, focus-group discussions and observations from a field visit (tentatively Quang Nam province in central Viet Nam). It will be implemented together with UNDP Viet Nam and pre-identified champions in the country (like Viet Nam Chamber of Commerce and Industries, Viet Nam Disaster Management Authority, and other bodies).

The consultants are expected to propose a methodology with a clear intent to provide credible information to the assessment areas. The proposed methodology will need to ensure that the information collected is valid, reliable and sufficient to meet the assessment objective and that the analysis is logical, coherent and complete. At the same time, triangulation principles (utilizing multiple sources of data and methods) should be applied in order to validate findings.

In the proposed methodology, the consultants will need to provide the followings: 1) what information should be collected, 2) from which sources / or stakeholders it should be collected, 3) for what purpose it should be collected and 4) how the collected data will be analyzed in order to answer the assessment questions. The consultants are expected to submit this matrix as part of the inception report.

### IV. DELIVERABLES

The consultant team is expected to deliver the following deliverables:

# deliverable	Deliverables	Due date (2019)
1	An Inception Report explaining the assessment methodology including the approach, data collection tools, analysis framework, workplan, field-visit schedule and proposed human resources	By 29 May
2	The draft Assessment Report (English)	By 29 June
3	Presentation (English) at a workshop and collection of comments and feedback to improve the final report.	By 30 July
4	The final Assessment Report (English) (According to format in <b>Annex 1</b> )	By 15 August

The primary deliverable can be in the form of an executive summary and a main report, which is aided by data and maps.

Another key output of the landscape assessment are the recommendations towards building a private sector network on disaster management in Viet Nam, as detailed in Annex 1, Chapter 4.

Annexes will include the following:

1. Database of chambers, corporations and entities engaged in disaster management
2. Database of laws and legal frameworks
3. Database of government institutions, international actors and partners working with private sector entities on disaster management in Viet Nam
4. Set of good practices on individual and collective private sector action on disaster management
5. Set of good practices on SME resilience
6. Set of existing tools in Vietnam that can help private sector work on disaster management
7. Other relevant information and databases from the conduct of the landscape assessment

#### **V. DURATION OF ASSIGNMENT and Duty Station**

The assignment will be undertaken from April to August 2019. The consultants are not required to work from the UNDP office, but will be required to attend meetings as required.

The team leader will have maximum 20 days of work while the team member will have estimated 22 days of work.

Duty Station: Ha Noi and selected Province(s)

#### **VI. SUPERVISION AND MONITORING**

The consultants will work under the management of and report to UNDP Emergency and Recovery Program Analyst. This assignment will be technically supervised by UNDP Senior Technical Advisor on Disaster Risk Reduction and Climate Change Adaptation.

#### **VII. DEGREE OF EXPERTISE AND QUALIFICATIONS**

The consultants are responsible to report on the team's working progress and submit all the required deliverables to UNDP.

#### **Selection criteria and qualification requirement for team leader (International consultant):**

- Master degree or higher qualification in economics, business administration, disaster management, water resource management or other related fields – 100 points
- Strong understanding of national legislations, policies and programs for disaster management, private sector development, business / enterprise operations, especially in agriculture and tourism industries– 200 points

- Experience working with the private sector, business associations, business forums, VCCI, or with international organisations, government organisations, relevant ministries in DRR for the private sector – 300 points
- English proficient writing skill – 100 points
- Experience working with Vietnam’s disaster management system including international organisations and INGOs is an advantage – 100 points
- Proven research or assessment experience in identifying the needs of agriculture and tourism industry businesses for DRR, their roles and contributions to disaster management – 200 points.

**Selection criteria and qualification requirement for team member (national consultant):**

- Bachelor degree or higher qualification in economics, business administration, disaster management, water resource management or other related fields – 100 points
- Strong understanding of national legislations, policies and programs for disaster management, private sector development, business / enterprise operations, especially in agriculture and tourism industries– 200 points
- Experience working with the private sector, business associations, business forums, VCCI, or with international organisations, government organisations, relevant ministries in DRR for the private sector – 300 points
- English-Vietnamese translation and interpretation skill – 100 points
- Experience working with Vietnam’s disaster management system including international organisations and INGOs is an advantage – 100 points
- Proven researches or assessment experience in identifying the needs of agriculture and tourism industry businesses for DRR, their roles and contributions to disaster management – 200 points.

**VIII. ADMIN SUPPORT AND REFERENCE DOCUMENTS**

UNDP will provide administrative support to the consultant team during data collection / interviews / consultations in Hanoi and in the field. UNDP will transfer reference documents to the consultants after the contract is signed.

**IX. PAYMENT TERMS**

Fee will be made after the contract deliverables are accepted by UNDP.

- 50% of the fee will be paid after deliverable # 2 (draft report)
- 50% of the fee will be paid and liquidated upon satisfaction of deliverables.

The consultants must send a financial proposal based on Daily Fee using UN-EU cost norm 2017. The consultants shall quote an all-inclusive Daily Fee for the contract period. The term “all-inclusive” implies that all costs (professional fees, communications, consumables, etc.) that could

be incurred by the individual consultants in completing the assignment are already factored into the daily fee submitted in the proposal.

Travel costs to the provinces for both IC and NC will be provided separately by UNDP as applied using UN-EU cost norm. Per diem to provinces for NC will be provided separately by UNDP.

**X. CONSULTANT PRESENCE REQUIRED ON DUTY STATION/UNDP PREMISES**

NONE                       PARTIAL                       INTERMITTENT                       FULL-TIME

**XI. APPLICATION**

**For International consultant:**

1. A technical proposal (English) explaining the assessment methodology including: the required number of days in (i) Ha Noi and (ii) identified province(s), the assessment approach, data collection tools, analysis framework, workplan, field-visit schedule if necessary, proposed human resources, and
2. A financial bid as per template
3. CV (English)

**For National Consultant:**

1. Financial offer as per template
2. CV

## **ANNEX II**

### Database of chambers, corporations and entities engaged in disaster management

No.	Name	Function/Duties	Address	Contact
1	<b>The Vietnam Chamber of Commerce and Industry (VCCI)</b>	a national organization which assembles and represents the business community, entrepreneurs, employers, and business associations in Vietnam. The purpose of the Chamber is to develop, protect, and support the business community, contribute to national socio-economic development	<b>Head office at No.9, Dao Duy Anh Str., Hanoi, Vietnam (other 7 branches offices, 2 representative offices and 2 training centers in the country)</b>	Pham Ngoc Thach, Deputy head of Legal department @ <a href="mailto:phamngocthach@gmail.com">phamngocthach@gmail.com</a>
2	The assistance center for SME, north of Vietnam (SME_TAC Hanoi)	A technical assistance center under Enterprises Development Agency/MPI	10th floor, Lot D25, MPI building, Ton That Thuyet Rd., Hanoi	Nguyen My Anh, <a href="mailto:myanhviedc@gmail.com">myanhviedc@gmail.com</a>
3	SME development supporting center (SMEDEC 2)	An SME supporting center under Directorate of Standards, Metrology and Quality/MOST	64-66 Mac Dinh Chi Str., Da Kao dist., HCMC	<a href="mailto:info@smedec.com">info@smedec.com</a>

## **ANNEX III**

### Database of laws and legal frameworks

#### **International commitments that Vietnam is a party of**

<b>Name</b>	<b>About</b>	<b>Ratified/adopted by</b>	<b>Notes</b>
Sendai Framework for 2015-2030	The framework makes disaster risk reduction an integral part of national socio-economic development; Vietnam has focused on efforts to reduce economic losses due to storms, floods and droughts via investment in disaster risk mitigation.	Adopted by UN member states in 2015	The Framework promotes the participation of civil society, volunteers, work organizations and community-based organizations, including women, youth, elderly and indigenous groups, in collaboration with public institutions
The Hyogo Framework for Action 2005-2015	The HFA outlines five priorities for action, and offers guiding principles and practical means for achieving disaster resilience. Its goal is to substantially reduce disaster losses by 2015 by building the resilience of nations and communities to disasters.	Adopted by UN member states in 2005	a 10-year plan to make the world safer from natural hazards from 2005 to 2015
2005 AADMER	ASEAN Agreement on Disaster Management and Emergency Response	in force since 2009	AADMER Work Programme 2016-2020
UN General Assembly Resolution 68/211	The resolution calls for commitments that are specific and time-bound to support the development of partnerships at local, national, regional and global levels, and implementation of local and national disaster risk reduction strategies and plans.	20 December 2013	
The Paris Climate Agreement	The Agreement includes an adaption component for loss and damage and a 2016 Plan for Implementation		
UNFCCC	United Nations Framework Convention on Climate Change, which includes an adaptation component for loss and damage	ratified in 1994	
Kyoto Protocol (KP)	Under the Kyoto Protocol, the signatories agree to cut emissions of greenhouse gases (including CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs and SF <sub>6</sub> ) by at least 5% of 1990 levels over the 2008-2012 period. This aims to prevent adverse effects	ratified in 2002	Vietnam National Steering Committee implementing the UNFCCC and KP, and submissions to the UNFCCC Secretariat in 2003, 2010 and 2014, reporting on

	of greenhouse gas emissions on the global climate.		climate change response efforts and GHG inventories
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### Laws/regulations related to disaster preparation, response and recovery in Viet Nam

Name	About	Ratified/adopted by	Notes
The Law on Natural Disaster Prevention and Control	It is an improvement over the 1993 Ordinance, as it emphasizes long-term planning and risk management, including of physical infrastructure, and covers 19 types of disasters. Responsibility for disaster risk management lies with MARD's Disaster Management Authority	Came into force in May 2014	Law No. 33/2013/QH13
Decision No. 26/2017/QĐ-TTg	Establishes the Vietnam Disaster Management Authority under MARD and Central Steering Committee on Natural Disaster Prevention and Control, which provides guidance on disaster prevention and reconstruction	Dated July 3, 2017	<a href="http://phongchongthientai.vn">http://phongchongthientai.vn</a>
Ordinance on Prevention and Control of Floods and Storms of 1993	implementing decree of 1996 for its implementation, Decision on the Establishment of the CCFSC of 1996, and amendments to the Ordinance in 2000		The Ordinance and the 2000 Ordinance Amending and Supplementing a Number of Articles of the 1993 Ordinance cease to be effective on the date the Law No. 33/2013/QH13 come into effective
The National Strategy to 2020	The National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020 was issued in 2007	Dated Nov. 16, 2007	Although it predates the subsequent Law on NDPC, it is still valid No: 172/2007/Q -TTg
CBDRM programme	The Community Awareness-Raising and National Community Based Disaster Risk Management (CBDRM) Project	Dated July 13, 2009	Decision No. 1002/QĐ-TTg Focus on communities, but still not on SMEs and the private sector
The Action Plan on Promoting Public-Private Partnership		2011	<a href="http://dmc.gov.vn/document-detail/promoting-public-private-partnership-for-disaster-risk-reduction-in-">http://dmc.gov.vn/document-detail/promoting-public-private-partnership-for-disaster-risk-reduction-in-</a>

for Disaster Risk Reduction in Viet Nam			<a href="http://viet-nam-doc986.html?lang=en-US">viet-nam-doc986.html?lang=en-US</a>
The National Target Programme to Respond to Climate Change	To assess climate change impacts and to develop adaptation and mitigation measures	December 2008	
The National Climate Change Strategy	Outlines climate change responses critical for Vietnam for the period of 2011-2015, as well as for 2016-2050	2011	
The National Green Growth Strategy		2012	
Resolution No. 24-NQ/TW	Pro-actively responding to climate change, enhancing natural resource management and environmental protection	2013	
The Law on Water 1998 & the revised law in 2012	The law on management, protection and use of water resources	The original Law on water in 1998 and the revised one in 2012	In the revised law under Chapter V. Prevention, Control and Recovery of aftermaths cause by water specified articles related to water related disasters
The Law on Land Use, 2013	This Law on land ownership, land management and use, the rights and obligations of land users.	2013	
The Law on Economical and Efficient use of Energy of 2010	This Law provides for economical and efficient use of energy, policies and measures to promote economical and efficient use of energy, and for rights, obligations and responsibilities of organizations, households and individuals in economical and efficient use of energy	2011	
The Law on Environmental Protection of 1998, was	Prevention of environmental pollution and degradation is regarded as the key task in the revised	2015	

revised in 2014	Environmental Protection Law		
The Law on Forest Protection of 2002, revised in 2018 as the Law on Forests	This law is critical to increasing soil absorption and reducing runoff by protecting against deforestation (several interviews commented on increases in flooding due to deforestation in the mountainous areas).	2018	
The Law on Support to SMEs	creates a framework for supporting the development of SMEs and moving informal businesses into the formal business sector	2017	

## **ANNEX IV**

Database of government institutions, international actors and partners working with private sector entities on disaster management in Viet Nam

No.	Name	Address	Contact
1	Vietnam Disaster Management Authorities (VMAD)/MARD	No.2 Ngoc Ha Str., Hanoi	Mr. Le Quang Tuan, Deputy DG of ICD
2	UNDP	UN House, 304 Kim Ma Str., Hanoi	Mr. Duong Van Hung, Technical Specialist
3	The Asian Development Bank	Manila, the Philippines	Ms. Jane V. David, DRM Senior Specialist
4	Asian Disaster Preparedness Center	Bangkok, Thailand	Mr. Aslam Perwaiz, Head of Iprepare Business
5	The Asia Foundation	Lakeside Green Building, 5th floor 33 Truc Bach Street Ba Dinh, Hanoi, Vietnam	Mr. Nguyen Tri Thanh, Senior Specialist
6	World Vision Vietnam	9th floor, Mercury Building 444 Hoang Hoa Tham Street Tay Ho Dist., Hanoi	Mr. Le Van Duong, Senior Officer
7	Oxfam Vietnam	22 Le Dai Hanh Str., Hanoi	Mr. Nguyen Ngoc Huy, CCA & DRR Specialist
8	GIZ/RFPI program		Ms. Pham Phuong Mai, Program Officer
9	CRS Vietnam	Room 301-303, Building E3, Trung Tu Diplomatic Compound, #6 Dang Van Ngu Street, Dong Da District, Ha Noi	Ms. Nguyen Thi Hien, Program Manager, DRR & CCA
10	American Red Cross	7th floor, 59 Quang Trung   Ha Noi	Mr. Dao Phi Hung, Senior Officer

## **ANNEX V**

Set of existing tools in Vietnam that can help private sector work on disaster management

Under the 5 years project: *“Strengthening Public-Private Partnerships for Disaster Risk Management and Community Resilience in Vietnam”* funded by the United States Agency for International Development (USAID), The Asia Foundation (TAF) has supported the Center for Education and Development (CED) and other partners in Vietnam to develop and maintain a website <http://readyasia.com/>. The website has online materials, including training manuals, publications, videos, and multimedia on basic knowledge on disasters, DRR, DRM, BCP, etc. that is very useful for community, enterprises and also relevant management agencies. Under this website, we can find many guiding tools that can support businesses on DRM, some examples are as following:

- ✓ Guidelines for Improving the Effectiveness of Disaster Related Corporate Social Responsibility
- ✓ Natural Disaster Preparedness and Response Planning for Businesses Handbook
- ✓ Natural Disaster Risk Management Business Training Handbook
- ✓ Natural Disaster Risk Management in Businesses
- ✓ Natural Disaster Safety Guidebook for Staff of Businesses and their Families

## **ANNEX VI**

Other relevant information and databases from the conduct of the landscape assessment

- List of people met and/or interviewed during the landscape assessment

No.	Name	Title
1	Nguyen Tien Quang	Director of VCCI Da Nang office
2	Truong Thi Kim Anh	Deputy Director of VCCI Da Nang office
3	Nguyen Thi Hong Loan	International Relations Department, VCCI DN
4	Le Van Tu	Deputy Director of Quang Nam irrigation Department
5	Nguyen Ngoc Khai	Head of disaster management division, Quang Nam Irrigation Department
6	Phan Lanh	Executive committee member of the Association
7	Hoang Cong Doan	Vice chairman of the Association
8	Phan Quoc Hung	Vice chairman of the Association
9	Dinh Minh Tri	Member of the Association
10	Tran Thi Le Hang	Member of the Association
11	Nguyen Thi Tuyen	Head of the Association's Office
12	Van Thi Tho	Secretary of the Association
13	Phan Xuan Thanh	Chairman of the Association
14	Nguyen Trong Tuan	Hoi An Tour Company (member)
15	Huynh Thi Minh Tam	Quang Nam tourist promotion center
16	Le Dinh Tuong	Deputy Head of Economic Division, Hoi An City's People Committee
17	Pham Que Anh	Director of Hoi An Express tour company
18	Ha Nguyen Han	General Manager
19	Le Ba Ninh	Deputy Director of Khanh Hoa DARD
20	Le Xuan Thai	Head of Khanh Hoa DRM coordination office
21	Mr. Thuyen	Official of Khanh Hoa DRM coordination office
22	Ms. Huong	Khanh Hoa Red Cross Society
23	Mr. Tu	Vice chairman of the Union
24	Ms. Huong	Head of the Union's office
25	Mr. Vu	Head of education and communication division
26	Mr. Tuan	Head of socio-economic division
27	Mr. Dang Cuu	Head of Economic Division
28	Mr. Minh	Staff of Khanh Hoa DRM coordination office
29	Mr. Hung	Staff of Economic Division
30	Ms. Diem	Staff of Khanh Hoa Red Cross Society
31	Dang Thi Thu Nguyet	Chief of Representative Office, VCCI
32	Chu Quoc Anh	Staff of VCCI
33	Doan Minh Hai	Staff of VCCI
34	Nguyen Van Thanh	General secretary of Nha Trang -Khanh Hoa tourism association

35	Tran Sy Quan	Deputy Director of the Department
36	Luong Xuan Thu	Head of propaganda and support tax payers division
37	Ms. Huong	Vice chairperon of Khanh Hoa Red Cross Society
38	Mr. Le Van Phuong	Owner of the company
39	Mr. & Mrs. Ngoc Khuong	Owners of the factory/business
40	Al Panico	Country Representative
41	Dao Phi Hung	Program Coordinator
42	Minh Pham	Country Manager
43	Nguyen Manh Linh	Deputy Chief Executive Officer
44	Lê Thị Thanh A	Manager, Public Sector Business Development Department
45	Duong Thanh Tung	Manager, Risk Management Department
46	Nguyen Quoc Huy	Deputy Manager, Risk Management Department